

ALMANAC

XIX

SOLAR ECLIPSES IN BCE

The almanac XIX contains a list of solar eclipses from the 4th millennium BCE to the 1st millennium BCE, from the 40th century BCE to the 1st century BCE.

4TH MILLENNIUM BCE

In the 4th millennium BCE the total number of solar eclipses was 2 387 solar eclipses: 846 partial solar eclipses, 803 annular solar eclipses (787 central annular solar eclipses with two limits, 11 central annular solar eclipses with one limit, 5 non-central annular solar eclipses with one limit), 634 total solar eclipses (624 central total solar eclipses with two limits, 5 central total solar eclipses with one limit, 5 non-central total solar eclipses with one limit), 104 hybrid solar eclipses.

40TH CENTURY BCE

In the 40th century BCE the total number of solar eclipses was ---- solar eclipses: ---- partial solar eclipses, ---- annular solar eclipses (---- central annular solar eclipses with two limits, ---- central annular solar eclipses with one limit, ---- non-central annular solar eclipses with one limit), ---- total solar eclipses (---- central total solar eclipses with two limits, ---- central total solar eclipses with one limit, ---- non-central total solar eclipses with one limit), ---- hybrid solar eclipses.

CATALOG	CALENDAR	TD	ΔT	LUNA	SAROS	ECL.	GAMMA	ECL.	LAT.	LONG.	SUN	SUN	PATH	CENTRAL
NUMBER	DATE	OF	s	NUM	NUM	TYPE		MAG.	°	°	ALT	AZM	WIDTH	DUR.
		GREATEST									°	°		
		ECLIPSE												
-----	-3999 Jun 14 01:59:34	86400	-74193	-56	T	0.2492	1.0765	32.1N	143.3E	75	168	256	06m17s	

----- -3999 Dec 08 08:52:31 86400 -74187 -51 A 0.4340 0.9238 8.1N 51.3E 64 191 318 10m34s
----- -3984 Mar 01 19:15:19 86400 -74011 -53 T 0.2535 1.0706 4.7S 109.3W 75 160 237 06m12s
----- -3984 Aug 25 17:49:37 86400 -74005 -48 A -0.2650 0.9242 6.1N 91.2W 75 17 295 10m06s
----- -3981 Dec 19 16:34:47 86400 -73964 -51 A 0.4167 0.9276 4.3N 65.5W 65 187 299 10m14s
----- -3966 Mar 13 02:47:48 86400 -73788 -53 T 0.1884 1.0747 5.4S 138.2E 79 156 246 06m21s
----- -3966 Sep 06 01:25:58 86400 -73782 -48 A -0.2438 0.9221 4.8N 154.8E 76 21 302 10m02s
----- -3963 Dec 30 00:10:53 86400 -73741 -51 A 0.3937 0.9320 0.8N 179.4E 67 183 276 09m39s
----- -3948 Mar 23 10:16:59 86400 -73565 -53 T 0.1201 1.0781 5.5S 26.6E 83 153 254 06m27s
----- -3948 Sep 16 09:10:41 86400 -73559 -48 A -0.2294 0.9204 2.4N 38.4E 77 24 308 09m54s
----- -3930 Apr 03 17:41:24 86400 -73342 -53 T 0.0475 1.0806 5.4S 83.7W 87 151 260 06m31s
----- -3930 Sep 27 17:03:06 86400 -73336 -48 A -0.2207 0.9194 0.8S 80.0W 77 27 312 09m44s
----- -3912 Apr 14 01:04:14 86400 -73119 -53 T -0.0268 1.0823 4.9S 166.5E 88 331 265 06m34s
----- -3912 Oct 08 01:00:13 86400 -73113 -48 A -0.2156 0.9190 4.7S 160.1E 78 29 313 09m32s

39TH CENTURY BCE

In the 39th century BCE the total number of solar eclipses was ---- solar eclipses:
---- partial solar eclipses, ---- annular solar eclipses (---- central annular solar eclipses with two limits, ---- central annular solar eclipses with one limit, ---- non-central annular solar eclipses with one limit), ---- total solar eclipses (---- central total solar eclipses with two limits, ---- central total solar eclipses with one limit, ---- non-central total solar eclipses with one limit), ---- hybrid solar eclipses.

CATALOG	CALENDAR	TD	ΔT	LUNA	SAROS	ECL.	GAMMA	ECL.	LAT.	LONG.	SUN	SUN	PATH	CENTRAL
NUMBER	DATE	OF	s	NUM	NUM	TYPE		MAG.	°	°	ALT	AZM	WIDTH	DUR.
			GREATEST								°	°		

ECLIPSE

----- -3894 Apr 25 08:24:10 86400 -72896 -53 T -0.1037 1.0830 4.5S 57.4E 84 330 268 06m36s
----- -3894 Oct 19 09:01:45 86400 -72890 -48 A -0.2137 0.9193 9.0S 39.1E 78 30 312 09m18s
----- -3890 Aug 07 16:12:50 86400 -72843 -46 H3 -0.1909 1.0169 12.8N 65.7W 79 11 59 01m46s
----- -3880 Jan 22 09:07:58 86400 -72726 -60 H 0.4570 1.0114 3.0N 48.2E 63 184 44 01m15s
----- -3877 Nov 10 18:11:25 86400 -72679 -58 A 0.4620 0.9210 16.8N 79.8W 62 210 332 09m04s
----- -3876 May 05 15:45:30 86400 -72673 -53 T -0.1796 1.0828 4.2S 52.0W 80 331 270 06m38s
----- -3876 Oct 29 17:05:10 86400 -72667 -48 A -0.2128 0.9203 13.6S 82.4W 78 30 308 09m03s
----- -3872 Aug 18 00:14:08 86400 -72620 -46 H -0.1631 1.0105 13.1N 174.4E 81 15 37 01m05s
----- -3859 Nov 21 02:11:39 86400 -72456 -58 A 0.4662 0.9208 13.2N 159.0E 62 207 333 09m28s
----- -3858 May 16 23:07:07 86400 -72450 -53 T -0.2549 1.0815 4.1S 161.7W 75 332 271 06m38s
----- -3841 Dec 02 10:07:27 86400 -72233 -58 A 0.4733 0.9213 10.4N 39.0E 62 204 333 09m49s
----- -3840 May 27 06:31:26 86400 -72227 -53 T -0.3279 1.0795 4.5S 87.7E 71 334 270 06m37s
----- -3823 Dec 12 17:54:49 86400 -72010 -58 A 0.4869 0.9224 8.6N 78.8W 61 200 332 10m05s
----- -3822 Jun 07 13:59:08 86400 -72004 -53 T -0.3979 1.0765 5.4S 23.9W 67 337 268 06m33s
----- -3807 Feb 23 07:04:06 86400 -71822 -50 T -0.0969 1.0718 25.4S 79.8E 84 351 235 06m15s
----- -3807 Aug 19 02:08:39 86400 -71816 -45 A 0.0432 0.9289 24.4N 148.7E 87 185 267 09m21s
----- -3805 Dec 24 01:34:52 86400 -71787 -58 A 0.5059 0.9238 7.9N 165.3E 60 196 330 10m16s
----- -3804 Jun 17 21:32:16 86400 -71781 -53 T -0.4628 1.0729 6.8S 137.2W 62 341 265 06m26s

38TH CENTURY BCE

In the 38th century BCE the total number of solar eclipses was ---- solar eclipses:
---- partial solar eclipses, ---- annular solar eclipses (---- central annular solar eclipses with two limits, ---- central annular solar eclipses with one limit, ---- non-central annular solar eclipses with one limit), ---- total solar eclipses (---- central total solar eclipses with two limits, ---- central total solar eclipses with

one limit, ---- non-central total solar eclipses with one limit), ---- hybrid solar eclipses.

CATALOG	CALENDAR	TD	ΔT	LUNA	SAROS	ECL.	GAMMA	ECL.	LAT.	LONG.	SUN	SUN	PATH	CENTRAL
NUMBER	DATE	OF	s	NUM	NUM	TYPE		MAG.	°	°	ALT	AZM	WIDTH	DUR.
		GREATEST									°	°		
		ECLIPSE												
-----	-3790 Sep 10 10:20:58	86400	-71605	-55 A	-0.6736	0.9264	25.4S	17.3E	47	13	372	09m16s		
-----	-3789 Mar 06 14:43:54	86400	-71599	-50 T	-0.0382	1.0754	19.1S	35.6W	88	349	244	06m39s		
-----	-3789 Aug 30 09:38:40	86400	-71593	-45 A	0.0168	0.9270	20.5N	36.8E	89	188	274	09m42s		
-----	-3786 Jan 03 09:04:33	86400	-71564	-58 A	0.5331	0.9257	8.5N	51.9E	58	192	329	10m18s		
-----	-3786 Jun 29 05:11:13	86400	-71558	-53 T	-0.5227	1.0685	8.8S	107.5E	58	344	260	06m12s		
-----	-3772 Sep 20 18:11:28	86400	-71382	-55 A	-0.6855	0.9225	29.5S	103.0W	47	17	398	09m23s		
-----	-3771 Mar 16 22:16:55	86400	-71376	-50 T	0.0265	1.0784	12.1S	150.2W	89	165	253	06m58s		
-----	-3771 Sep 09 17:18:38	86400	-71370	-45 A	-0.0018	0.9255	16.3N	78.0W	90	95	281	09m56s		
-----	-3768 Jan 14 16:26:01	86400	-71341	-58 A	0.5668	0.9278	10.3N	59.6W	55	187	328	10m11s		
-----	-3754 Oct 02 02:06:38	86400	-71159	-55 A	-0.6930	0.9194	33.7S	135.7E	46	20	418	09m21s		
-----	-3753 Mar 28 05:45:29	86400	-71153	-50 T	0.0950	1.0805	4.5S	95.7E	85	164	261	07m09s		
-----	-3753 Sep 21 01:07:02	86400	-71147	-45 A	-0.0139	0.9245	11.9N	164.7E	89	16	285	10m01s		
-----	-3750 Jan 24 23:35:01	86400	-71118	-58 A	0.6101	0.9301	13.7N	168.4W	52	183	331	09m50s		
-----	-3736 Oct 12 10:06:40	86400	-70936	-55 A	-0.6960	0.9170	37.9S	13.4E	46	23	434	09m15s		
-----	-3735 Apr 07 13:09:55	86400	-70930	-50 T	0.1674	1.0819	3.6N	17.9W	80	162	267	07m12s		
-----	-3735 Oct 01 09:02:53	86400	-70924	-45 A	-0.0201	0.9240	7.4N	45.3E	89	18	286	10m00s		
-----	-3732 Feb 05 06:36:06	86400	-70895	-58 A	0.6596	0.9323	18.3N	84.2E	49	179	337	09m18s		
-----	-3731 Jul 20 19:06:07	86400	-70877	-43 H3	0.0502	1.0171	27.0N	108.8W	87	173	59	01m42s		
-----	-3718 Oct 23 18:08:24	86400	-70713	-55 A	-0.6975	0.9153	42.3S	109.0W	46	25	444	09m03s		
-----	-3717 Apr 18 20:32:36	86400	-70707	-50 T	0.2412	1.0823	11.9N	131.3W	76	161	272	07m06s		
-----	-3717 Oct 12 17:03:16	86400	-70701	-45 A	-0.0233	0.9243	2.8N	75.3W	89	18	286	09m54s		
-----	-3713 Aug 01 02:49:12	86400	-70654	-43 H	0.0087	1.0103	24.5N	136.8E	89	178	36	01m04s		

37TH CENTURY BCE

In the 37th century BCE the total number of solar eclipses was ---- solar eclipses:
---- partial solar eclipses, ---- annular solar eclipses (---- central annular solar eclipses with two limits, ---- central annular solar eclipses with one limit, ---- non-central annular solar eclipses with one limit), ---- total solar eclipses (---- central total solar eclipses with two limits, ---- central total solar eclipses with one limit, ---- non-central total solar eclipses with one limit), ---- hybrid solar eclipses.

CATALOG	CALENDAR	TD	ΔT	LUNA	SAROS	ECL.	GAMMA	ECL.	LAT.	LONG.	SUN	SUN	PATH	CENTRAL
NUMBER	DATE	OF	s	NUM	NUM	TYPE		MAG.	°	°	ALT	AZM	WIDTH	DUR.
			GREATEST								°	°		
			ECLIPSE											
-----	-3699 Apr 29 03:52:45	86400	-70484	-50	T	0.3170	1.0817	20.5N	115.7E	71	161	277	06m51s	
-----	-3699 Oct 23 01:08:29	86400	-70478	-45	A	-0.0229	0.9252	1.7S	162.8E	89	18	282	09m42s	
-----	-3681 May 10 11:14:17	86400	-70261	-50	T	0.3917	1.0802	29.1N	2.5E	67	160	280	06m29s	
-----	-3681 Nov 03 09:15:14	86400	-70255	-45	A	-0.0220	0.9268	6.3S	40.6E	89	17	275	09m26s	
-----	-3663 May 20 18:36:29	86400	-70038	-50	T	0.4658	1.0777	37.7N	110.6W	62	160	283	06m01s	
-----	-3663 Nov 13 17:22:02	86400	-70032	-45	A	-0.0217	0.9292	10.7S	81.5W	89	16	265	09m06s	
-----	-3612 Feb 28 02:38:09	86400	-69410	-47	T	-0.1086	1.0739	24.3S	148.0E	84	338	241	06m01s	

36TH CENTURY BCE

In the 36th century BCE the total number of solar eclipses was ---- solar eclipses:
---- partial solar eclipses, ---- annular solar eclipses (---- central annular solar eclipses with two limits, ---- central annular solar eclipses with one limit, ---- non-central annular solar eclipses with one limit), ---- total solar eclipses (---- central total solar eclipses with two limits, ---- central total solar eclipses with one limit, ---- non-central total solar eclipses with one limit), ---- hybrid solar eclipses.

CATALOG	CALENDAR	TD	ΔT	LUNA	SAROS	ECL.	GAMMA	ECL.	LAT.	LONG.	SUN	SUN	PATH	CENTRAL
NUMBER	DATE	OF	s	NUM	NUM	TYPE		MAG.	°	°	ALT	AZM	WIDTH	DUR.
		GREATEST									°	°		
		ECLIPSE												
-----	-3594 Mar 10 10:17:25	86400	-69187	-47	T	-0.1695	1.0765	24.1S	34.9E	80	334	251	06m04s	
-----	-3576 Mar 20 17:50:14	86400	-68964	-47	T	-0.2358	1.0783	23.7S	76.7W	76	331	260	06m05s	
-----	-3572 Jul 02 22:28:00	86400	-68911	-40	H3	0.0569	1.0166	26.0N	160.1W	87	177	57	01m41s	
-----	-3550 Oct 26 07:47:49	86400	-68635	-33	A	0.6154	0.9189	33.9N	76.5E	52	202	386	09m16s	
-----	-3558 Apr 01 01:17:55	86400	-68741	-47	T	-0.3063	1.0792	23.2S	172.9E	72	329	267	06m05s	
-----	-3540 Apr 11 08:41:51	86400	-68518	-47	T	-0.3797	1.0793	22.8S	63.3E	68	328	275	06m03s	
-----	-3535 Jan 17 08:01:54	86400	-68459	-35	H	0.5778	1.0109	11.1N	59.0E	55	175	46	01m10s	
-----	-3532 Nov 05 15:51:26	86400	-68412	-33	A	0.6165	0.9178	29.7N	46.0W	52	200	392	09m50s	
-----	-3522 Apr 22 16:03:26	86400	-68295	-47	T	-0.4551	1.0784	22.7S	45.9W	63	328	281	06m01s	
-----	-3514 Nov 16 23:52:36	86400	-68189	-33	A	0.6158	0.9174	25.8N	168.2W	52	197	394	10m20s	

35TH CENTURY BCE

In the 35th century BCE the total number of solar eclipses was ---- solar eclipses:

---- partial solar eclipses, ---- annular solar eclipses (---- central annular solar eclipses with two limits, ---- central annular solar eclipses with one limit, ---- non-central annular solar eclipses with one limit), ---- total solar eclipses (---- central total solar eclipses with two limits, ---- central total solar eclipses with one limit, ---- non-central total solar eclipses with one limit), ---- hybrid solar eclipses.

CATALOG	CALENDAR	TD	ΔT	LUNA	SAROS	ECL.	GAMMA	ECL.	LAT.	LONG.	SUN	SUN	PATH	CENTRAL
NUMBER	DATE	OF	s	NUM	NUM	TYPE		MAG.	°	°	ALT	AZM	WIDTH	DUR.
GREATEST											°	°		
ECLIPSE														
-----	-3496	Nov 27 07:50:22	86400	-67966	-33 A	0.6126	0.9177	22.1N	70.4E	52 194	392	10m45s		
-----	-3495	May 23 06:18:20	86400	-67960	-28 T	-0.6869	1.0759	29.7S	95.0E	46 343	336	06m15s		
-----	-3478	Dec 08 15:42:55	86400	-67743	-33 A	0.6051	0.9188	18.6N	49.8W	53 190	385	11m02s		
-----	-3477	Jun 03 13:42:52	86400	-67737	-28 T	-0.6158	1.0749	21.4S	20.3W	52 347	307	06m33s		
-----	-3471	Jan 29 22:33:46	86380	-67667	-44 T	0.1767	1.0646	13.3S	154.5W	80 180	215	06m03s		
-----	-3469	Nov 29 10:02:09	86288	-67632	-52 A	0.9485	0.9079	48.9N	64.8E	18 217	1098	09m03s		
-----	-3459	Jun 13 21:12:47	85977	-67514	-28 T	-0.5493	1.0728	14.1S	137.8W	57 351	282	06m40s		
-----	-3460	Dec 18 23:27:45	85992	-67520	-33 A	0.5913	0.9204	15.2N	169.7W	54 186	373	11m10s		
-----	-3453	Feb 10 06:34:17	85792	-67444	-44 T	0.2193	1.0677	9.4S	82.6E	77 176	226	06m22s		
-----	-3451	Dec 09 17:52:54	85700	-67409	-52 A	0.9575	0.9094	49.4N	59.5W	16 212	1199	09m07s		
-----	-3442	Dec 30 07:04:48	85406	-67297	-33 A	0.5711	0.9227	12.1N	71.8E	55 182	356	11m04s		
-----	-3441	Jun 25 04:47:05	85390	-67291	-28 T	-0.4864	1.0699	7.7S	103.7E	61 355	260	06m36s		
-----	-3435	Feb 20 14:26:34	85206	-67221	-44 T	0.2687	1.0703	4.3S	38.8W	74 172	237	06m35s		
-----	-3427	Sep 16 16:04:48	84929	-67115	-30 A	-0.4001	0.9254	8.2S	76.0W	66 26	303	09m03s		
-----	-3423	Jan 09 14:32:20	84821	-67074	-33 A	0.5429	0.9254	9.0N	44.1W	57 178	334	10m45s		
-----	-3423	Jul 05 12:28:24	84806	-67068	-28 T	-0.4297	1.0664	2.4S	15.8W	65 359	240	06m23s		
-----	-3417	Mar 03 22:11:27	84622	-66998	-44 T	0.3244	1.0724	1.8N	159.0W	71 169	248	06m42s		
-----	-3413	Jun 16 02:07:25	84484	-66945	-37 H	-0.1568	1.0152	10.9N	140.0E	81 340	53	01m33s		
-----	-3409	Sep 27 23:56:06	84346	-66892	-30 A	-0.3895	0.9222	11.2S	162.9E	67 28	315	09m10s		

----- -3405 Jan 20 21:50:21 84239 -66851 -33 A 0.5070 0.9285 6.3N 157.3W 59 173 310 10m12s
----- -3405 Jul 16 20:15:10 84223 -66845 -28 T -0.3780 1.0621 1.8N 135.9W 68 3 220 06m00s

34TH CENTURY BCE

In the 34th century BCE the total number of solar eclipses was ---- solar eclipses:
---- partial solar eclipses, ---- annular solar eclipses (---- central annular solar eclipses with two limits, ---- central annular solar eclipses with one limit, ---- non-central annular solar eclipses with one limit), ---- total solar eclipses (---- central total solar eclipses with two limits, ---- central total solar eclipses with one limit, ---- non-central total solar eclipses with one limit), ---- hybrid solar eclipses.

CATALOG	CALENDAR	TD	ΔT	LUNA	SAROS	ECL.	GAMMA	ECL.	LAT.	LONG.	SUN	SUN	PATH	CENTRAL
NUMBER	DATE	OF	s	NUM	NUM	TYPE		MAG.	°	°	ALT	AZM	WIDTH	DUR.
		GREATEST										°	°	
		ECLIPSE												
-----	-3399 Mar 14 05:49:56	84041	-66775	-44	T	0.3853	1.0737	8.7N	81.7E	67	166	258	06m40s	
-----	-3391 Oct 08 07:52:10	83765	-66669	-30	A	-0.3829	0.9197	14.9S	40.6E	67	30	326	09m13s	
-----	-3387 Jan 31 04:57:37	83658	-66628	-33	A	0.4619	0.9319	3.8N	92.7E	62	169	286	09m30s	
-----	-3381 Mar 25 13:21:07	83461	-66552	-44	T	0.4523	1.0743	16.4N	36.5W	63	163	269	06m30s	
-----	-3377 Dec 31 10:32:08	83308	-66493	-32	H	-0.4095	1.0130	46.6S	2.5E	66	17	49	01m05s	
-----	-3373 Oct 19 15:52:06	83186	-66446	-30	A	-0.3797	0.9178	19.2S	82.7W	68	32	334	09m14s	
-----	-3363 Apr 04 20:48:25	82883	-66329	-44	T	0.5222	1.0739	24.6N	154.2W	58	161	280	06m12s	
-----	-3355 Oct 29 23:54:14	82609	-66223	-30	A	-0.3789	0.9165	23.7S	153.6E	68	32	339	09m13s	
-----	-3337 Nov 10 07:55:37	82034	-66000	-30	A	-0.3775	0.9161	28.2S	30.5E	68	32	341	09m09s	
-----	-3319 Nov 20 15:54:50	81461	-65777	-30	A	-0.3745	0.9164	32.5S	91.6W	68	30	341	09m03s	

----- -3301 Jun 07 08:36:08 80905 -65560 -35 T -0.2682 1.0696 2.9N 30.8E 74 338 235 06m08s

33RD CENTURY BCE

In the 33rd century BCE the total number of solar eclipses was ---- solar eclipses:
---- partial solar eclipses, ---- annular solar eclipses (---- central annular solar eclipses with two limits, ---- central annular solar eclipses with one limit, ---- non-central annular solar eclipses with one limit), ---- total solar eclipses (---- central total solar eclipses with two limits, ---- central total solar eclipses with one limit, ---- non-central total solar eclipses with one limit), ---- hybrid solar eclipses.

CATALOG	CALENDAR	TD	ΔT	LUNA	SAROS	ECL.	GAMMA	ECL.	LAT.	LONG.	SUN	SUN	PATH	CENTRAL
NUMBER	DATE	OF	s	NUM	NUM	TYPE		MAG.	°	°	ALT	AZM	WIDTH	DUR.
		GREATEST									°	°		
		ECLIPSE												

----- -3283 Jun 17 16:05:17 80337 -65337 -35 T -0.3350 1.0690 1.5N 83.5W 70 342 238 06m14s

----- -3265 Jun 28 23:40:13 79770 -65114 -35 T -0.3970 1.0676 0.5S 160.3E 67 346 239 06m15s

----- -3254 May 29 06:04:59 79427 -64979 -34 H 0.2328 1.0123 28.0N 53.4E 76 165 44 01m13s

----- -3250 Sep 10 00:26:11 79293 -64926 -27 A 0.1724 0.9249 24.9N 147.8E 80 194 287 09m29s

----- -3247 Jul 09 07:22:06 79205 -64891 -35 T -0.4534 1.0656 3.0S 42.0E 63 350 240 06m11s

----- -3236 Dec 02 04:09:09 78848 -64750 -29 H 0.2367 1.0106 3.6S 88.1E 76 191 38 01m07s

----- -3232 Sep 20 08:09:28 78730 -64703 -27 A 0.1569 0.9218 20.0N 29.6E 81 196 299 10m03s

----- -3229 Jul 20 15:12:03 78642 -64668 -35 T -0.5033 1.0631 6.1S 78.8W 60 355 239 06m01s

----- -3218 Dec 13 12:42:04 78287 -64527 -29 H 0.2311 1.0155 6.8S 42.8W 77 188 55 01m38s

----- -3214 Apr 07 08:01:31 78184 -64486 -32 Tm 0.0363 1.0662 2.2S 27.1E 88 162 217 06m03s

----- -3214 Oct 01 15:59:44 78169 -64480 -27 A 0.1475 0.9192 15.2N 90.7W 81 198 309 10m31s

32ND CENTURY BCE

In the 32nd century BCE the total number of solar eclipses was ---- solar eclipses:
---- partial solar eclipses, ---- annular solar eclipses (---- central annular solar eclipses with two limits, ---- central annular solar eclipses with one limit, ---- non-central annular solar eclipses with one limit), ---- total solar eclipses (---- central total solar eclipses with two limits, ---- central total solar eclipses with one limit, ---- non-central total solar eclipses with one limit), ---- hybrid solar eclipses.

CATALOG	CALENDAR	TD	ΔT	LUNA	SAROS	ECL.	GAMMA	ECL.	LAT.	LONG.	SUN	SUN	PATH	CENTRAL
NUMBER	DATE	OF	s	NUM	NUM	TYPE		MAG.	°	°	ALT	AZM	WIDTH	DUR.
		GREATEST										°	°	
		ECLIPSE												

- -3196 Apr 17 15:20:28 77625 -64263 -32 T 0.1094 1.0696 6.1N 87.5W 84 162 228 06m16s
- -3196 Oct 11 23:54:09 77610 -64257 -27 A 0.1417 0.9173 10.4N 147.8E 82 198 317 10m54s
- -3189 Nov 24 02:03:11 77389 -64169 -28 H -0.2145 1.0146 25.5S 104.8E 77 27 51 01m17s
- -3178 Apr 28 22:37:26 77067 -64040 -32 T 0.1849 1.0722 14.5N 158.2E 79 162 239 06m21s
- -3178 Oct 23 07:53:28 77052 -64034 -27 A 0.1400 0.9160 5.7N 25.0E 82 198 322 11m13s
- -3177 Apr 18 15:55:06 77037 -64028 -22 T -0.5588 1.0758 32.0S 84.7W 56 338 294 06m02s
- -3171 Dec 04 10:42:23 76833 -63946 -28 Hm -0.2129 1.0135 29.2S 26.6W 78 24 47 01m11s
- -3160 May 09 05:56:01 76512 -63817 -32 T 0.2597 1.0738 22.9N 43.8E 75 162 248 06m18s
- -3160 Nov 02 15:53:53 76497 -63811 -27 A 0.1388 0.9155 1.1N 98.1W 82 197 324 11m26s
- -3159 Apr 28 23:16:26 76482 -63805 -22 T -0.4853 1.0759 23.2S 158.8E 61 340 279 06m23s
- -3153 Dec 15 19:15:46 76278 -63723 -28 H -0.2072 1.0127 32.0S 155.8W 78 20 45 01m09s

----- -3152 Jun 08 23:37:23 76264 -63717 -23 H 0.2278 1.0117 30.6N 134.6E 77 156 41 01m05s
----- -3142 May 20 13:15:34 75959 -63594 -32 T 0.3344 1.0746 31.2N 70.5W 70 163 256 06m07s
----- -3142 Nov 13 23:55:05 75944 -63588 -27 A 0.1385 0.9158 3.1S 138.8E 82 196 323 11m35s
----- -3141 May 10 06:35:50 75929 -63582 -22 T -0.4105 1.0750 14.7S 43.2E 66 343 265 06m37s
----- -3135 Dec 26 03:41:59 75726 -63500 -28 H -0.1962 1.0124 33.7S 77.3E 79 15 43 01m08s
----- -3134 Jun 20 06:42:46 75711 -63494 -23 H 0.1559 1.0135 29.5N 28.4E 81 161 47 01m17s
----- -3131 Apr 19 20:26:12 75625 -63459 -31 H -0.1439 1.0157 6.2S 166.5W 82 330 54 01m28s
----- -3124 Nov 24 07:52:34 75393 -63365 -27 A 0.1349 0.9167 7.2S 16.7E 82 193 319 11m36s
----- -3123 May 20 13:56:09 75378 -63359 -22 T -0.3367 1.0731 6.7S 72.2W 70 345 252 06m41s
----- -3116 Jan 06 12:00:12 75176 -63277 -28 H -0.1795 1.0123 34.1S 47.1W 79 10 43 01m09s
----- -3116 Jun 30 13:56:55 75161 -63271 -23 H 0.0901 1.0149 27.9N 80.2W 85 166 51 01m27s
----- -3113 May 01 03:19:14 75075 -63236 -31 H -0.2252 1.0121 6.2S 89.0E 77 331 43 01m09s
----- -3106 Dec 05 15:47:42 74844 -63142 -27 Am 0.1294 0.9184 10.8S 104.6W 83 190 312 11m29s
----- -3105 May 31 21:17:33 74829 -63136 -22 T -0.2642 1.0704 0.9N 172.8E 75 348 237 06m35s

31ST CENTURY BCE

In the 31st century BCE the total number of solar eclipses was ---- solar eclipses:
---- partial solar eclipses, ---- annular solar eclipses (---- central annular solar eclipses with two limits, ---- central annular solar eclipses with one limit, ---- non-central annular solar eclipses with one limit), ---- total solar eclipses (---- central total solar eclipses with two limits, ---- central total solar eclipses with one limit, ---- non-central total solar eclipses with one limit), ---- hybrid solar eclipses.

CATALOG	CALENDAR	TD	ΔT	LUNA	SAROS	ECL.	GAMMA	ECL.	LAT.	LONG.	SUN	SUN	PATH	CENTRAL
NUMBER	DATE	OF	s	NUM	NUM	TYPE		MAG.	°	°	ALT	AZM	WIDTH	DUR.

GREATEST

° °

ECLIPSE

----- -3098 Jan 16 20:08:18 74627 -63054 -28 H -0.1549 1.0124 33.1S 169.1W 81 5 43 01m11s
----- -3098 Jul 11 21:19:14 74613 -63048 -23 H 0.0302 1.0156 25.6N 168.7E 88 171 54 01m34s
----- -3095 Nov 03 21:11:18 74512 -63007 -26 H -0.0273 1.0119 8.5S 171.1E 88 28 41 01m04s
----- -3088 Dec 15 23:36:27 74296 -62919 -27 A 0.1181 0.9207 14.2S 136.0E 83 186 302 11m10s
----- -3087 Jun 11 04:41:11 74282 -62913 -22 T -0.1940 1.0668 7.9N 57.9E 79 351 222 06m21s
----- -3080 Jan 28 04:06:53 74081 -62831 -28 H -0.1233 1.0124 30.6S 70.9E 83 360 43 01m13s
----- -3080 Jul 22 04:52:22 74066 -62825 -23 H -0.0217 1.0161 22.9N 54.4E 89 355 55 01m39s
----- -3077 Nov 15 05:55:35 73966 -62784 -26 H -0.0292 1.0150 12.9S 37.4E 88 26 51 01m21s
----- -3070 Dec 27 07:18:24 73751 -62696 -27 A 0.1012 0.9236 17.1S 18.6E 84 182 290 10m40s
----- -3066 Oct 15 10:19:27 73636 -62649 -25 Hm 0.0042 1.0142 1.2N 27.9W 90 198 49 01m24s
----- -3062 Feb 07 11:54:45 73537 -62608 -28 H -0.0837 1.0125 26.8S 47.2W 85 355 43 01m16s
----- -3062 Aug 02 12:35:25 73522 -62602 -23 H -0.0659 1.0161 19.7N 62.8W 86 0 55 01m41s
----- -3055 Sep 13 16:26:20 73308 -62514 -24 A 0.0687 0.9222 16.9N 118.0W 86 206 295 09m12s
----- -3051 Jan 06 14:51:34 73208 -62473 -27 A 0.0767 0.9270 19.6S 96.2W 86 177 275 10m00s
----- -3048 Oct 25 19:02:41 73094 -62426 -25 H 0.0068 1.0106 3.2S 161.5W 90 199 37 01m04s
----- -3044 Feb 18 19:33:13 72994 -62385 -28 H -0.0374 1.0123 21.8S 163.7W 88 352 42 01m16s
----- -3044 Aug 12 20:27:59 72980 -62379 -23 H -0.1028 1.0161 16.0N 177.1E 84 5 55 01m42s
----- -3037 Sep 25 00:10:45 72766 -62291 -24 A 0.0841 0.9197 13.6N 123.9E 85 208 305 09m24s
----- -3033 Jan 17 22:16:28 72667 -62250 -27 A 0.0452 0.9308 21.5S 151.3E 88 172 260 09m11s
----- -3029 May 01 13:54:25 72539 -62197 -20 H -0.3160 1.0127 12.0S 81.2W 72 342 46 01m20s
----- -3026 Mar 01 02:59:37 72454 -62162 -28 H 0.0180 1.0118 15.7S 81.8E 89 167 41 01m15s
----- -3026 Aug 24 04:31:07 72439 -62156 -23 H -0.1318 1.0159 12.0N 53.9E 83 8 55 01m40s
----- -3019 Oct 05 08:00:51 72227 -62068 -24 A 0.0948 0.9178 9.7N 4.0E 85 209 313 09m35s
----- -3011 May 11 20:47:06 72000 -61974 -20 H2 -0.2350 1.0169 3.4S 170.5E 76 344 59 01m47s
----- -3008 Mar 11 10:18:11 71915 -61939 -28 H 0.0789 1.0109 8.8S 31.4W 86 165 38 01m10s
----- -3008 Sep 03 12:43:53 71901 -61933 -23 H -0.1533 1.0159 7.8N 71.9W 81 12 55 01m39s
----- -3001 Apr 22 10:45:29 71704 -61851 -29 T -0.3246 1.0757 14.3S 32.5W 71 330 258 06m02s
----- -3001 Oct 16 15:56:30 71689 -61845 -24 Am 0.1007 0.9165 5.4N 117.6W 84 210 319 09m46s

3RD MILLENNIUM BCE

In the 3rd millennium BCE the total number of solar eclipses was 2 362 solar eclipses: 841 partial solar eclipses, 806 annular solar eclipses (774 central annular solar eclipses with two limits, 17 central annular solar eclipses with one limit, 15 non-central annular solar eclipses with one limit), 646 total solar eclipses (635 central total solar eclipses with two limits, 5 central total solar eclipses with one limit, 6 non-central total solar eclipses with one limit), 69 hybrid solar eclipses.

30TH CENTURY BCE

In the 30th century BCE the total number of solar eclipses was 246 solar eclipses: 88 partial solar eclipses, 80 annular solar eclipses (79 central annular solar eclipses with two limits, 1 central annular solar eclipses with one limit, 0 non-central annular solar eclipses with one limit), 59 total solar eclipses (59 central total solar eclipses with two limits, 0 central total solar eclipses with one limit, 0 non-central total solar eclipses with one limit), 19 hybrid solar eclipses.

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°.	°	ALT	WIDTH	DUR.

GREATEST S ° km
ECLIPSE

-2999-Mar-02	08:16:32	73899	8970	-61828	-47	P	-t	-1.4688	0.1455	62S	131E	0			
-2999-Mar-31	18:51:33	73896	8970	-61827	-9	P	t-	1.2102	0.6117	61N	129E	0			
-2999-Aug-25	11:21:51	73884	8967	-61822	-42	P	-t	1.4914	0.0890	62N	90E	0			
-2999-Sep-23	23:02:46	73882	8967	-61821	-4	P	t-	-1.2344	0.5649	61S	70E	0			
-2998-Feb-19	12:37:20	73869	8964	-61816	-37	A	-p	-0.7722	0.9401	63S	19W	39	348	04m49s	
-2998-Aug-15	03:04:54	73854	8961	-61810	-32	T	-p	0.7794	1.0543	68N	118E	38	287	03m17s	
-2997-Feb-08	12:36:22	73839	8958	-61804	-27	A	nn	-0.0425	0.9392	24S	56W	87	226	07m24s	
-2997-Aug-04	18:56:48	73824	8955	-61798	-22	T	nn	0.0821	1.0400	28N	156W	85	135	03m38s	
-2996-Jan-28	15:42:09	73810	8952	-61792	-17	A	p-	0.6841	0.9707	19N	113W	47	143	03m24s	
-2996-Jul-24	06:23:00	73795	8949	-61786	-12	A	p-	-0.6802	0.9845	19S	25E	47	75	01m46s	
-2996-Dec-18	15:20:23	73782	8946	-61781	-45	P	-t	-1.3275	0.3926	68S	92E	0			
-2995-Jan-17	01:53:18	73780	8946	-61780	-7	P	t-	1.3527	0.3477	65N	85E	0			
-2995-Jun-13	19:17:27	73767	8943	-61775	-40	P	-t	1.4132	0.2560	69N	39E	0			
-2995-Jul-13	10:43:33	73765	8943	-61774	-2	P	t-	-1.4668	0.1645	66S	43W	0			
-2995-Dec-08	07:08:21	73753	8940	-61769	-35	T	-p	-0.6596	1.0407	60S	7E	48	182	02m49s	
-2994-Jun-02	20:28:56	73738	8937	-61763	-30	A	-p	0.6435	0.9637	56N	164E	50	171	03m14s	
-2994-Nov-27	21:05:39	73723	8934	-61757	-25	H	nn	0.0134	1.0035	15S	170E	89	12	00m22s	
-2993-May-23	03:42:34	73708	8931	-61751	-20	T	nn	-0.1556	1.0203	5N	71E	81	70	02m09s	
-2993-Nov-17	04:56:07	73693	8928	-61745	-15	A	p-	0.7379	0.9424	34N	65E	42	312	06m17s	
-2992-May-11	17:46:32	73678	8925	-61739	-10	T	t-	-0.8996	1.0600	51S	117W	25	451	04m18s	
-2992-Nov-05	05:45:08	73663	8922	-61733	-5	P	t-	1.4425	0.2153	71N	105E	0			
-2991-Apr-02	04:10:36	73651	8920	-61728	-38	T	-t	0.8877	1.0535	53N	40E	27	383	03m46s	
-2991-Sep-25	11:58:32	73636	8916	-61722	-33	A	-p	-0.9095	0.9491	53S	78W	24	448	04m30s	
-2990-Mar-22	17:26:21	73621	8913	-61716	-28	H	nn	0.1475	1.0094	1S	133W	82	33	01m01s	
-2990-Sep-14	21:06:15	73606	8910	-61710	-23	H	nn	-0.1676	1.0160	3N	169E	80	55	01m38s	
-2989-Mar-11	23:33:51	73592	8907	-61704	-18	A	p-	-0.6387	0.9542	51S	153E	50	217	04m17s	
-2989-Sep-04	11:52:04	73577	8904	-61698	-13	T	p-	0.5216	1.0511	47N	41W	58	199	03m51s	
-2988-Jan-30	07:58:59	73564	8902	-61693	-46	P	-t	1.5281	0.0614	67N	7E	0			
-2988-Feb-29	00:10:03	73562	8901	-61692	-8	P	t-	-1.3884	0.2994	70S	87W	0			
-2988-Jul-25	17:57:19	73549	8899	-61687	-41	P	-t	-1.4381	0.1891	66S	138W	0			
-2988-Aug-24	03:50:25	73547	8898	-61686	-3	P	t-	1.2139	0.6056	69N	136W	0			

-2987-Jan-18	12:52:48	73535	8896	-61681	-36	A	-p	0.7537	0.9826	25N	61W	41	94	01m54s
-2987-Jul-15	03:35:30	73520	8893	-61675	-31	A	-p	-0.7547	0.9707	25S	77E	41	160	03m23s
-2986-Jan-08	00:47:11	73505	8890	-61669	-26	T	nn	0.0101	1.0378	23S	117E	90	127	03m33s
-2986-Jul-04	06:15:58	73490	8887	-61663	-21	A	nn	-0.0130	0.9443	23N	30E	89	206	07m02s
-2986-Dec-28	16:32:36	73475	8884	-61657	-16	T	p-	-0.6717	1.0482	64S	140W	48	217	03m08s
-2985-Jun-23	06:45:11	73460	8881	-61651	-11	A	p-	0.7355	0.9510	65N	8W	42	265	03m56s
-2985-Nov-18	18:40:23	73448	8878	-61646	-44	P	-t	1.4073	0.2571	61N	90W	0		
-2985-Dec-18	07:30:30	73445	8878	-61645	-6	P	t-	-1.3773	0.3039	63S	127W	0		
-2984-May-13	02:39:54	73433	8875	-61640	-39	P	-t	-1.1865	0.6568	61S	155E	0		
-2984-Jun-11	12:16:03	73431	8874	-61639	-1	P	t-	1.4482	0.1783	62N	167E	0		
-2984-Nov-07	00:20:17	73418	8872	-61634	-34	A	-p	0.7732	0.9287	36N	146E	39	408	07m13s
-2983-May-02	18:04:49	73404	8869	-61628	-29	T	-p	-0.3997	1.0771	14S	135W	66	270	06m11s
-2983-Oct-26	23:54:15	73389	8866	-61622	-24	A	nn	0.1039	0.9159	1N	130E	84	321	09m55s
-2982-Apr-22	11:23:59	73374	8863	-61616	-19	T	n-	0.3463	1.0723	20N	55W	70	249	05m41s
-2982-Oct-16	00:18:14	73359	8860	-61610	-14	A	p-	-0.5749	0.9409	30S	102E	55	262	05m54s
-2981-Mar-13	15:22:36	73347	8857	-61605	-47	P	-t	-1.5369	0.0243	61S	13E	0		
-2981-Apr-12	01:56:03	73344	8857	-61604	-9	P	t-	1.1408	0.7396	61N	11E	0		
-2981-Sep-05	19:42:12	73332	8854	-61599	-42	P	-t	1.5073	0.0598	62N	47W	0		
-2981-Oct-05	07:32:38	73329	8854	-61598	-4	P	t-	-1.2254	0.5812	60S	68W	0		
-2980-Mar-01	19:26:48	73317	8851	-61593	-37	A	-p	-0.8364	0.9401	63S	114W	33	401	04m39s
-2980-Aug-25	11:22:57	73302	8848	-61587	-32	T	-p	0.8072	1.0503	65N	2W	36	282	03m01s
-2979-Feb-18	19:33:32	73287	8845	-61581	-27	A	nn	-0.0982	0.9435	25S	161W	84	210	06m34s
-2979-Aug-15	02:56:53	73273	8842	-61575	-22	T	-n	0.1182	1.0338	28N	84E	83	115	03m01s
-2978-Feb-07	23:11:22	73258	8839	-61569	-17	A	p-	0.6394	0.9779	17N	131E	50	101	02m30s
-2978-Aug-04	13:50:00	73243	8836	-61563	-12	A	p-	-0.6361	0.9785	16S	91W	50	99	02m29s
-2978-Dec-29	23:53:41	73231	8834	-61558	-45	P	-t	-1.3375	0.3734	67S	50W	0		
-2977-Jan-28	09:56:39	73228	8833	-61557	-7	P	t-	1.3187	0.4100	64N	48W	0		
-2977-Jun-25	01:44:15	73216	8831	-61552	-40	P	-t	1.4891	0.1275	68N	72W	0		
-2977-Jul-24	17:36:59	73213	8830	-61551	-2	P	t-	-1.4116	0.2600	65S	159W	0		
-2977-Dec-19	15:50:22	73201	8828	-61546	-35	T	-p	-0.6674	1.0417	63S	120W	48	188	02m49s
-2976-Jun-13	03:03:59	73186	8825	-61540	-30	A	-p	0.7208	0.9635	65N	61E	44	191	02m59s
-2976-Dec-08	05:40:44	73171	8821	-61534	-25	H	nn	0.0119	1.0022	19S	39E	89	8	00m14s
-2975-Jun-02	10:42:15	73157	8818	-61528	-20	T	nn	-0.0781	1.0230	12N	38W	86	79	02m25s

-2975-Nov-27	13:11:04	73142	8815	-61522	-15	A	p-	0.7396	0.9409	31N	63W	42	323	06m45s
-2974-May-23	01:05:07	73127	8812	-61516	-10	T	p-	-0.8238	1.0639	40S	122E	34	367	05m02s
-2974-Nov-16	13:45:21	73112	8809	-61510	-5	P	t-	1.4418	0.2165	71N	31W	0		
-2973-Apr-13	11:30:58	73100	8807	-61505	-38	T	-t	0.9607	1.0489	65N	93W	15	600	03m02s
-2973-Oct-06	20:11:13	73085	8804	-61499	-33	A	-p	-0.9127	0.9499	57S	151E	24	449	04m11s
-2972-Apr-02	00:28:52	73070	8801	-61493	-28	H	-n	0.2196	1.0075	7N	116E	77	26	00m48s
-2972-Sep-25	05:35:17	73055	8798	-61487	-23	H	-n	-0.1768	1.0164	1S	39E	80	57	01m39s
-2971-Mar-22	06:13:35	73040	8795	-61481	-18	A	p-	-0.5672	0.9552	42S	47E	55	197	04m32s
-2971-Sep-14	20:25:07	73026	8792	-61475	-13	T	p-	0.5061	1.0491	42N	171W	59	189	03m48s
-2970-Mar-11	06:47:19	73011	8789	-61469	-8	P	t-	-1.3196	0.4158	70S	158E	0		
-2970-Aug-06	01:44:19	72999	8786	-61464	-41	P	-t	-1.4830	0.1085	67S	93E	0		
-2970-Sep-04	12:10:18	72996	8786	-61463	-3	P	t-	1.1953	0.6397	70N	84E	0		
-2969-Jan-29	20:37:46	72984	8783	-61458	-36	A	-p	0.7858	0.9886	29N	178E	38	65	01m12s
-2969-Jul-26	10:47:47	72969	8780	-61452	-31	A	-p	-0.8101	0.9635	30S	36W	36	226	04m09s
-2968-Jan-19	09:02:08	72954	8777	-61446	-26	T	nn	0.0357	1.0433	22S	8W	88	145	04m06s
-2968-Jul-14	12:58:45	72939	8774	-61440	-21	A	nn	-0.0796	0.9406	20N	72W	86	221	07m52s
-2967-Jan-08	01:02:35	72925	8771	-61434	-16	T	p-	-0.6540	1.0510	64S	98E	49	224	03m21s
-2967-Jul-03	13:25:52	72910	8768	-61428	-11	A	p-	0.6617	0.9516	63N	98W	48	236	04m05s
-2967-Nov-29	03:12:31	72898	8766	-61423	-44	P	-t	1.4117	0.2498	62N	131E	0		
-2967-Dec-28	15:58:29	72895	8765	-61422	-6	P	t-	-1.3699	0.3174	64S	94E	0		
-2966-May-24	09:44:33	72883	8763	-61417	-39	P	-t	-1.2582	0.5229	61S	38E	0		
-2966-Jun-22	19:18:33	72880	8762	-61416	-1	P	t-	1.3740	0.3122	63N	50E	0		
-2966-Nov-18	08:30:36	72868	8760	-61411	-34	A	-p	0.7753	0.9272	33N	19E	39	420	07m46s
-2965-May-14	01:24:40	72853	8757	-61405	-29	T	-p	-0.4756	1.0775	15S	114E	62	282	06m18s
-2965-Nov-07	07:55:32	72838	8754	-61399	-24	A	nn	0.1051	0.9161	3S	6E	84	321	10m03s
-2964-May-02	18:42:35	72824	8751	-61393	-19	T	n-	0.2710	1.0712	20N	166W	74	240	05m38s
-2964-Oct-26	08:32:49	72809	8748	-61387	-14	A	p-	-0.5725	0.9425	34S	25W	55	254	05m32s
-2963-Apr-22	08:56:11	72794	8745	-61381	-9	P	t-	1.0687	0.8718	61N	105W	0		
-2963-Sep-16	04:10:04	72782	8742	-61376	-42	P	-t	1.5180	0.0402	61N	175E	0		
-2963-Oct-15	16:07:58	72779	8742	-61375	-4	P	t-	-1.2200	0.5911	60S	152E	0		
-2962-Mar-13	02:06:44	72767	8739	-61370	-37	A	-t	-0.9076	0.9395	63S	157E	24	530	04m31s
-2962-Sep-05	19:48:52	72752	8736	-61364	-32	T	-p	0.8287	1.0464	62N	127W	34	274	02m48s
-2961-Mar-02	02:23:01	72737	8733	-61358	-27	A	nn	-0.1607	0.9478	25S	96E	81	194	05m49s

-2961-Aug-26	11:04:25	72723	8730	-61352	-22	T	-n	0.1473	1.0277	27N	39W	81	95	02m27s
-2960-Feb-19	06:34:14	72708	8727	-61346	-17	A	p-	0.5883	0.9850	15N	17E	54	65	01m38s
-2960-Aug-14	21:24:55	72693	8724	-61340	-12	A	p-	-0.5994	0.9725	14S	152E	53	122	03m09s
-2959-Jan-09	08:19:56	72681	8721	-61335	-45	P	-t	-1.3538	0.3422	66S	171E	0		
-2959-Feb-07	17:52:35	72678	8721	-61334	-7	P	t-	1.2781	0.4856	63N	179W	0		
-2959-Jul-05	08:17:36	72666	8718	-61329	-40	P	-t	1.5592	0.0095	67N	176E	0		
-2959-Aug-04	00:38:16	72664	8718	-61328	-2	P	t-	-1.3626	0.3440	64S	84E	0		
-2959-Dec-30	00:25:17	72651	8715	-61323	-35	T	-p	-0.6810	1.0428	66S	116E	47	196	02m50s
-2958-Jun-24	09:46:40	72637	8712	-61317	-30	A	-p	0.7926	0.9628	74N	40W	37	223	02m48s
-2958-Dec-19	14:07:31	72622	8709	-61311	-25	H	nn	0.0041	1.0013	22S	89W	90	5	00m08s
-2957-Jun-13	17:48:56	72607	8706	-61305	-20	T	nn	-0.0053	1.0250	19N	148W	90	85	02m34s
-2957-Dec-08	21:20:02	72592	8703	-61299	-15	A	p-	0.7367	0.9401	28N	169E	42	327	07m09s
-2956-Jun-02	08:27:00	72578	8700	-61293	-10	T	p-	-0.7502	1.0664	31S	3E	41	327	05m38s
-2956-Nov-26	21:43:25	72563	8697	-61287	-5	P	t-	1.4392	0.2206	70N	165W	0		
-2955-Apr-23	18:46:39	72551	8695	-61282	-38	P	-t	1.0371	0.9446	71N	102E	0		
-2955-May-23	01:43:44	72548	8694	-61281	0	Pb	t-	-1.4702	0.1121	70S	142E	0		
-2955-Oct-17	04:30:51	72536	8692	-61276	-33	A	-p	-0.9109	0.9515	60S	19E	24	430	03m52s
-2954-Apr-13	07:22:29	72521	8689	-61270	-28	H	-p	0.2980	1.0048	16N	8E	73	17	00m30s
-2954-Oct-06	14:12:31	72506	8686	-61264	-23	H2	-n	-0.1798	1.0172	6S	94W	80	60	01m42s
-2953-Apr-02	12:45:06	72492	8683	-61258	-18	A	p-	-0.4896	0.9558	33S	56W	60	183	04m48s
-2953-Sep-26	05:05:06	72477	8680	-61252	-13	T	p-	0.4965	1.0472	37N	57E	60	180	03m45s
-2952-Mar-21	13:19:26	72462	8677	-61246	-8	P	t-	-1.2459	0.5414	71S	45E	0		
-2952-Aug-16	09:38:41	72450	8674	-61241	-41	P	-t	-1.5210	0.0415	68S	40W	0		
-2952-Sep-14	20:37:17	72447	8674	-61240	-3	P	t-	1.1832	0.6615	70N	58W	0		
-2951-Feb-09	04:16:56	72435	8671	-61235	-36	A	-p	0.8236	0.9944	34N	57E	34	35	00m34s
-2951-Aug-05	18:05:49	72420	8668	-61229	-31	A	-p	-0.8597	0.9562	37S	152W	30	314	04m48s
-2950-Jan-29	17:10:28	72406	8665	-61223	-26	T	nn	0.0673	1.0489	19S	132W	86	163	04m39s
-2950-Jul-25	19:49:24	72391	8662	-61217	-21	A	nn	-0.1392	0.9369	16N	176W	82	237	08m42s
-2949-Jan-19	09:24:02	72376	8659	-61211	-16	T	p-	-0.6297	1.0539	63S	20W	51	230	03m36s
-2949-Jul-14	20:17:15	72361	8656	-61205	-11	A	p-	0.5960	0.9519	60N	166E	53	220	04m16s
-2949-Dec-10	11:38:31	72349	8654	-61200	-44	P	-t	1.4198	0.2357	62N	7W	0		
-2948-Jan-09	00:17:42	72347	8653	-61199	-6	P	t-	-1.3567	0.3416	65S	43W	0		
-2948-Jun-03	16:54:39	72334	8651	-61194	-39	P	-t	-1.3262	0.3953	62S	81W	0		

-2948-Jul-03	02:29:43	72332	8650	-61193	-1	P	t-	1.3057	0.4359	64N	70W	0		
-2948-Nov-28	16:36:20	72320	8648	-61188	-34	A	-p	0.7804	0.9262	31N	108W	38	432	08m15s
-2947-May-24	08:46:47	72305	8645	-61182	-29	T	-p	-0.5495	1.0770	16S	1E	57	294	06m22s
-2947-Nov-17	15:55:30	72290	8642	-61176	-24	A	nn	0.1078	0.9171	7S	116W	84	317	10m09s
-2946-May-14	01:59:03	72275	8639	-61170	-19	T	nn	0.1943	1.0691	21N	84E	79	229	05m34s
-2946-Nov-06	16:49:46	72261	8636	-61164	-14	A	p-	-0.5712	0.9449	38S	153W	55	244	05m08s
-2945-May-03	15:52:16	72246	8633	-61158	-9	T	t-	0.9939	1.0039	62N	150E	5	156	00m14s
-2945-Sep-27	12:45:41	72234	8630	-61153	-42	P	-t	1.5233	0.0304	61N	35E	0		
-2945-Oct-27	00:46:46	72231	8630	-61152	-4	P	t-	-1.2169	0.5969	60S	12E	0		
-2944-Mar-23	08:38:22	72219	8627	-61147	-37	As	-t	-0.9848	0.9367	62S	82E	9	-	04m20s
-2944-Sep-16	04:23:05	72204	8624	-61141	-32	T	-p	0.8433	1.0427	58N	102E	32	263	02m38s
-2943-Mar-12	09:04:03	72190	8622	-61135	-27	A	nn	-0.2306	0.9520	25S	4W	77	180	05m09s
-2943-Sep-05	19:19:38	72175	8619	-61129	-22	T	-n	0.1694	1.0217	25N	163W	80	75	01m55s
-2942-Mar-01	13:49:16	72160	8616	-61123	-17	A	p-	0.5297	0.9922	13N	94W	58	32	00m49s
-2942-Aug-26	05:07:51	72145	8613	-61117	-12	A	p-	-0.5699	0.9666	14S	33E	55	145	03m46s
-2941-Jan-20	16:38:12	72133	8610	-61112	-45	P	-t	-1.3771	0.2974	65S	34E	0		
-2941-Feb-19	01:40:24	72131	8610	-61111	-7	P	t-	1.2300	0.5761	62N	52E	0		
-2941-Aug-15	07:49:19	72116	8607	-61105	-2	P	t-	-1.3214	0.4143	63S	36W	0		
-2940-Jan-10	08:53:38	72104	8604	-61100	-35	T	-p	-0.7002	1.0439	68S	3W	45	206	02m51s
-2940-Jul-04	16:36:51	72089	8601	-61094	-30	A	-p	0.8591	0.9616	83N	133W	30	276	02m40s
-2940-Dec-29	22:28:26	72074	8598	-61088	-25	H	nn	-0.0079	1.0008	24S	144E	89	3	00m05s
-2939-Jun-24	01:01:45	72060	8595	-61082	-20	T	nn	0.0635	1.0264	26N	102E	86	90	02m38s
-2939-Dec-19	05:22:35	72045	8592	-61076	-15	A	p-	0.7295	0.9399	25N	44E	43	326	07m25s
-2938-Jun-13	15:52:57	72030	8589	-61070	-10	T	p-	-0.6795	1.0677	23S	115W	47	301	06m04s
-2938-Dec-08	05:36:51	72016	8586	-61064	-5	P	t-	1.4327	0.2310	69N	62E	0		
-2937-May-05	02:00:50	72003	8584	-61059	-38	P	-t	1.1137	0.7977	71N	23W	0		
-2937-Jun-03	09:07:15	72001	8583	-61058	0	P	t-	-1.4034	0.2423	69S	16E	0		
-2937-Oct-28	12:53:07	71989	8581	-61053	-33	A	-p	-0.9077	0.9537	64S	113W	24	404	03m32s
-2936-Apr-23	14:13:13	71974	8578	-61047	-28	H	-p	0.3776	1.0015	24N	100W	68	6	00m09s
-2936-Oct-16	22:54:15	71959	8575	-61041	-23	Tm	-n	-0.1798	1.0184	10S	133E	80	64	01m47s
-2935-Apr-12	19:10:02	71945	8572	-61035	-18	A	p-	-0.4069	0.9560	24S	158W	66	174	05m06s
-2935-Oct-06	13:51:00	71930	8569	-61029	-13	T	p-	0.4918	1.0456	32N	77W	60	174	03m44s
-2934-Apr-01	19:44:31	71915	8566	-61023	-8	P	t-	-1.1655	0.6793	71S	67W	0		

-2934-Sep-26	05:10:55	71901	8563	-61017	-3	P	t-	1.1771	0.6720	71N	158E	0		
-2933-Feb-20	11:46:42	71888	8560	-61012	-36	A	-p	0.8698	0.9998	41N	63W	29	1	00m01s
-2933-Aug-17	01:33:29	71874	8557	-61006	-31	A	-t	-0.9002	0.9491	43S	89E	25	432	05m18s
-2932-Feb-10	01:10:30	71859	8554	-61000	-26	T	nn	0.1064	1.0544	15S	106E	84	181	05m11s
-2932-Aug-05	02:48:48	71844	8551	-60994	-21	A	nn	-0.1913	0.9332	12N	77E	79	254	09m26s
-2931-Jan-29	17:37:27	71830	8548	-60988	-16	T	p-	-0.5988	1.0569	60S	139W	53	235	03m54s
-2931-Jul-25	03:17:48	71815	8545	-60982	-11	A	p-	0.5372	0.9517	57N	66E	57	210	04m28s
-2931-Dec-20	19:58:10	71803	8543	-60977	-44	P	-t	1.4327	0.2131	63N	143W	0		
-2930-Jan-19	08:27:20	71800	8542	-60976	-6	P	t-	-1.3364	0.3787	66S	178W	0		
-2930-Jun-15	00:09:00	71788	8540	-60971	-39	P	-t	-1.3915	0.2724	63S	159E	0		
-2930-Jul-14	09:49:34	71786	8539	-60970	-1	P	t-	1.2431	0.5494	65N	168E	0		
-2930-Dec-10	00:37:53	71773	8537	-60965	-34	A	-p	0.7884	0.9259	30N	127E	38	444	08m38s
-2929-Jun-04	16:11:35	71759	8534	-60959	-29	T	-p	-0.6217	1.0755	18S	112W	51	308	06m21s
-2929-Nov-28	23:53:37	71744	8531	-60953	-24	A	nn	0.1123	0.9186	11S	122E	84	310	10m11s
-2928-May-24	09:16:39	71729	8528	-60947	-19	T	nn	0.1190	1.0661	21N	26W	83	218	05m29s
-2928-Nov-17	01:08:23	71715	8525	-60941	-14	A	p-	-0.5704	0.9479	43S	80E	55	230	04m43s
-2927-May-13	22:45:26	71700	8522	-60935	-9	H	p-	0.9174	1.0052	61N	75E	23	45	00m20s
-2927-Oct-07	21:27:30	71688	8520	-60930	-42	P	-t	1.5246	0.0280	61N	107W	0		
-2927-Nov-06	09:28:38	71685	8519	-60929	-4	P	t-	-1.2155	0.5996	61S	130W	0		
-2926-Apr-03	15:03:29	71673	8517	-60924	-37	P	-t	-1.0665	0.8495	60S	6W	0		
-2926-Sep-27	13:03:17	71659	8514	-60918	-32	T	-p	0.8533	1.0395	55N	32W	31	251	02m30s
-2925-Mar-23	15:40:00	71644	8511	-60912	-27	A	np	-0.3055	0.9559	25S	104W	72	168	04m36s
-2925-Sep-17	03:41:50	71629	8508	-60906	-22	H	-n	0.1850	1.0160	21N	69E	79	56	01m25s
-2924-Mar-11	20:59:55	71615	8505	-60900	-17	A	p-	0.4660	0.9991	12N	156E	62	4	00m06s
-2924-Sep-05	12:57:23	71600	8502	-60894	-12	A	p-	-0.5467	0.9609	15S	88W	57	167	04m19s
-2923-Jan-31	00:48:58	71588	8499	-60889	-45	P	-t	-1.4072	0.2392	64S	101W	0		
-2923-Mar-01	09:22:03	71585	8499	-60888	-7	P	t-	1.1760	0.6787	62N	74W	0		
-2923-Aug-25	15:09:16	71571	8496	-60882	-2	P	t-	-1.2871	0.4722	62S	158W	0		
-2922-Jan-20	17:11:47	71558	8493	-60877	-35	T	-p	-0.7277	1.0450	69S	118W	43	220	02m51s
-2922-Jul-15	23:37:53	71544	8490	-60871	-30	A	-p	0.9175	0.9598	86N	135W	23	375	02m36s
-2921-Jan-10	06:38:53	71529	8487	-60865	-25	H	nn	-0.0281	1.0005	26S	21E	88	2	00m03s
-2921-Jul-05	08:23:54	71515	8484	-60859	-20	Tm	nn	0.1254	1.0272	31N	10W	83	93	02m37s
-2921-Dec-30	13:15:41	71500	8481	-60853	-15	A	p-	0.7150	0.9402	23N	80W	44	317	07m35s

-2920-Jun-23	23:25:12	71485	8478	-60847	-10	T	p-	-0.6136	1.0680	16S	126E	52	281	06m19s
-2920-Dec-18	13:25:14	71471	8476	-60841	-5	P	t-	1.4221	0.2481	68N	70W	0		
-2919-May-15	09:11:32	71458	8473	-60836	-38	P	-t	1.1923	0.6476	71N	146W	0		
-2919-Jun-13	16:31:52	71456	8473	-60835	0	P	t-	-1.3378	0.3697	69S	110W	0		
-2919-Nov-07	21:19:39	71444	8470	-60830	-33	A	-p	-0.9020	0.9567	68S	114E	25	367	03m10s
-2918-May-04	20:58:02	71429	8467	-60824	-28	A	-p	0.4611	0.9976	34N	153E	62	10	00m14s
-2918-Oct-28	07:40:13	71415	8464	-60818	-23	T	-n	-0.1769	1.0202	15S	1W	80	70	01m56s
-2917-Apr-24	01:30:14	71400	8461	-60812	-18	A	pn	-0.3208	0.9557	15S	101E	71	170	05m25s
-2917-Oct-17	22:41:54	71385	8458	-60806	-13	T	n-	0.4911	1.0443	28N	147E	60	169	03m44s
-2916-Apr-12	02:06:50	71371	8455	-60800	-8	P	t-	-1.0821	0.8232	72S	179W	0		
-2916-Oct-06	13:49:00	71356	8452	-60794	-3	P	t-	1.1754	0.6745	71N	12E	0		
-2915-Mar-02	19:11:56	71344	8450	-60789	-36	H	-p	0.9207	1.0046	50N	176E	23	41	00m23s
-2915-Aug-27	09:07:51	71329	8447	-60783	-31	A	-t	-0.9341	0.9421	50S	33W	20	605	05m38s
-2914-Feb-20	09:02:51	71315	8444	-60777	-26	T	-n	0.1523	1.0596	10S	15W	81	198	05m39s
-2914-Aug-16	09:58:04	71300	8441	-60771	-21	A	nn	-0.2351	0.9297	8N	33W	76	271	10m02s
-2913-Feb-10	01:42:07	71285	8438	-60765	-16	T	p-	-0.5612	1.0597	55S	102E	56	238	04m14s
-2913-Aug-05	10:29:41	71271	8435	-60759	-11	A	p-	0.4867	0.9514	52N	39W	61	204	04m42s
-2912-Jan-01	04:08:39	71258	8433	-60754	-44	P	-t	1.4520	0.1790	64N	82E	0		
-2912-Jan-30	16:27:10	71256	8432	-60753	-6	P	t-	-1.3092	0.4284	67S	49E	0		
-2912-Jun-25	07:31:37	71244	8430	-60748	-39	P	-t	-1.4508	0.1606	64S	36E	0		
-2912-Jul-24	17:20:07	71241	8429	-60747	-1	P	t-	1.1884	0.6487	66N	43E	0		
-2912-Dec-20	08:31:49	71229	8427	-60742	-34	A	-p	0.8019	0.9260	30N	4E	36	460	08m53s
-2911-Jun-14	23:40:00	71215	8424	-60736	-29	T	-p	-0.6908	1.0731	22S	133E	46	325	06m14s
-2911-Dec-09	07:47:25	71200	8421	-60730	-24	A	nn	0.1205	0.9210	13S	2E	83	301	10m09s
-2910-Jun-04	16:35:19	71185	8418	-60724	-19	Tm	nn	0.0454	1.0623	20N	136W	87	204	05m21s
-2910-Nov-28	09:24:27	71171	8415	-60718	-14	A	p-	-0.5669	0.9518	47S	45W	55	213	04m17s
-2909-May-25	05:38:10	71156	8412	-60712	-9	H	p-	0.8416	1.0031	61N	18W	32	20	00m13s
-2909-Oct-19	06:14:43	71144	8409	-60707	-42	P	-t	1.5219	0.0326	61N	111E	0		
-2909-Nov-17	18:10:55	71142	8409	-60706	-4	P	t-	-1.2145	0.6018	61S	88E	0		
-2908-Apr-13	21:22:47	71129	8406	-60701	-37	P	-t	-1.1521	0.7030	60S	112W	0		
-2908-Oct-07	21:49:13	71115	8403	-60695	-32	T	-p	0.8585	1.0368	51N	168W	31	237	02m24s
-2907-Apr-02	22:10:36	71100	8400	-60689	-27	A	-p	-0.3851	0.9594	24S	158E	67	158	04m09s
-2907-Sep-27	12:10:44	71086	8398	-60683	-22	H	-n	0.1945	1.0107	18N	60W	79	38	00m57s

-2906-Mar-23	04:03:38	71071	8395	-60677	-17	H	p-	0.3953	1.0057	12N	48E	67	21	00m33s
-2906-Sep-16	20:55:01	71056	8392	-60671	-12	A	p-	-0.5307	0.9555	17S	149E	58	188	04m47s
-2905-Feb-11	08:51:47	71044	8389	-60666	-45	P	-t	-1.4442	0.1673	63S	126E	0		
-2905-Mar-12	16:57:22	71042	8389	-60665	-7	P	t-	1.1161	0.7938	61N	160E	0		
-2905-Sep-05	22:38:01	71027	8386	-60659	-2	P	t-	-1.2599	0.5178	62S	79E	0		
-2904-Feb-01	01:22:29	71015	8383	-60654	-35	T	-p	-0.7612	1.0458	69S	130E	40	236	02m51s
-2904-Jul-26	06:48:42	71000	8380	-60648	-30	A	-p	0.9687	0.9573	77N	151E	14	659	02m33s
-2903-Jan-20	14:41:04	70986	8377	-60642	-25	H	nn	-0.0543	1.0004	27S	101W	87	1	00m02s
-2903-Jul-15	15:53:15	70971	8374	-60636	-20	T	nn	0.1821	1.0276	35N	123W	79	95	02m33s
-2902-Jan-09	21:00:33	70957	8371	-60630	-15	A	p-	0.6944	0.9411	20N	160E	46	303	07m35s
-2902-Jul-05	07:03:46	70942	8369	-60624	-10	T	p-	-0.5527	1.0675	10S	7E	56	264	06m23s
-2902-Dec-29	21:05:10	70928	8366	-60618	-5	P	t-	1.4043	0.2770	67N	162E	0		
-2901-May-26	16:23:45	70915	8363	-60613	-38	P	-t	1.2688	0.5024	70N	90E	0		
-2901-Jun-25	00:02:10	70913	8363	-60612	0	P	t-	-1.2770	0.4869	68S	124E	0		
-2901-Nov-19	05:45:30	70901	8360	-60607	-33	A	-p	-0.8979	0.9602	71S	18W	26	331	02m48s
-2900-May-15	03:41:58	70886	8357	-60601	-28	A	-p	0.5441	0.9930	43N	46E	57	29	00m39s
-2900-Nov-07	16:27:08	70872	8354	-60595	-23	T	-n	-0.1738	1.0225	19S	136W	80	78	02m07s

29TH CENTURY BCE

In the 29th century BCE the total number of solar eclipses was 233 solar eclipses: 80 partial solar eclipses, 85 annular solar eclipses (79 central annular solar eclipses with two limits, 3 central annular solar eclipses with one limit, 3 non-central annular solar eclipses with one limit), 64 total solar eclipses (63 central total solar eclipses with two limits, 1 central total solar eclipses with one limit, 0 non-central total solar eclipses with one limit), 4 hybrid solar eclipses.

DATE	OF	s	SIGMA	NUM	NUM	TYPE		MAG	°	°	ALT	WIDTH	DUR.
	GREATEST		S								°	km	
	ECLIPSE												
-2899-May-04	07:47:45	70857	8351	-60589	-18	A	nn	-0.2326	0.9549	6S	1E	77 169	05m43s
-2899-Oct-28	07:35:07	70843	8348	-60583	-13	T	n-	0.4927	1.0435	23N	10E	60 166	03m46s
-2898-Apr-23	08:25:14	70828	8345	-60577	-8	As	t-	-0.9946	0.9425	71S	58E	4 -	04m11s
-2898-Oct-17	22:31:35	70813	8342	-60571	-3	P	t-	1.1779	0.6691	71N	135W	0	
-2897-Mar-14	02:30:07	70801	8340	-60566	-36	T	-t	0.9780	1.0076	62N	48E	11 132	00m33s
-2897-Sep-07	16:50:45	70787	8337	-60560	-31	A	-t	-0.9601	0.9357	57S	160W	16 875	05m50s
-2896-Mar-02	16:48:03	70772	8334	-60554	-26	T	-n	0.2048	1.0644	4S	135W	78 215	06m02s
-2896-Aug-26	17:17:34	70758	8331	-60548	-21	A	nn	-0.2702	0.9264	3N	146W	74 287	10m27s
-2895-Feb-20	09:37:45	70743	8328	-60542	-16	T	p-	-0.5161	1.0623	49S	17W	59 239	04m36s
-2895-Aug-15	17:52:06	70729	8325	-60536	-11	A	p-	0.4441	0.9510	47N	149W	63 201	04m55s
-2894-Jan-11	12:10:51	70716	8323	-60531	-44	P	-t	1.4772	0.1345	65N	51W	0	
-2894-Feb-10	00:17:00	70714	8322	-60530	-6	P	t-	-1.2747	0.4917	68S	82W	0	
-2894-Jul-06	15:01:14	70702	8320	-60525	-39	P	-t	-1.5050	0.0584	64S	88W	0	
-2894-Aug-05	01:00:54	70699	8319	-60524	-1	P	t-	1.1410	0.7347	67N	85W	0	
-2894-Dec-31	16:17:43	70687	8317	-60519	-34	A	-p	0.8214	0.9264	31N	118W	35 482	08m57s
-2893-Jun-26	07:14:09	70673	8314	-60513	-29	T	-p	-0.7553	1.0699	26S	16E	41 344	05m58s
-2893-Dec-20	15:37:05	70658	8311	-60507	-24	A	nn	0.1321	0.9239	15S	118W	82 290	10m02s
-2892-Jun-14	23:56:27	70644	8308	-60501	-19	T	nn	-0.0255	1.0578	19N	113E	89 190	05m10s
-2892-Dec-08	17:39:07	70629	8305	-60495	-14	A	p-	-0.5613	0.9561	51S	169W	56 192	03m50s
-2891-Jun-04	12:31:25	70614	8302	-60489	-9	A	p-	0.7670	0.9999	61N	113W	40 1	00m00s
-2891-Oct-29	15:04:39	70602	8300	-60484	-42	P	-t	1.5182	0.0390	61N	33W	0	
-2891-Nov-28	02:51:44	70600	8299	-60483	-4	P	t-	-1.2113	0.6080	62S	53W	0	
-2890-Apr-25	03:38:28	70588	8297	-60478	-37	P	-t	-1.2401	0.5522	60S	143E	0	
-2890-Oct-19	06:39:01	70573	8294	-60472	-32	T	-p	0.8608	1.0346	48N	53E	30 224	02m21s
-2889-Apr-14	04:39:38	70559	8291	-60466	-27	A	-p	-0.4671	0.9625	25S	60E	62 151	03m48s
-2889-Oct-08	20:43:19	70544	8288	-60460	-22	H	-n	0.2004	1.0060	13N	169E	78 21	00m33s
-2888-Apr-02	11:05:34	70530	8285	-60454	-17	H	p-	0.3217	1.0118	12N	59W	71 43	01m07s
-2888-Sep-27	04:58:32	70515	8282	-60448	-12	A	p-	-0.5203	0.9506	20S	25E	59 208	05m10s
-2887-Feb-21	16:46:09	70503	8280	-60443	-45	P	-t	-1.4885	0.0807	62S	4W	0	
-2887-Mar-23	00:26:34	70500	8279	-60442	-7	P	t-	1.0502	0.9211	61N	37E	0	

-2887-Sep-16	06:15:31	70486	8276	-60436	-2	P	t-	-1.2396	0.5516	61S	47W	0		
-2886-Feb-11	09:22:30	70474	8274	-60431	-35	T	-p	-0.8035	1.0461	68S	19E	36	258	02m48s
-2886-Aug-06	14:11:30	70459	8271	-60425	-30	P	-t	1.0111	0.9526	64N	48E	0		
-2885-Jan-31	22:30:55	70445	8268	-60419	-25	H	nn	-0.0901	1.0002	28S	142E	85	1	00m01s
-2885-Jul-26	23:33:48	70430	8265	-60413	-20	T	-n	0.2307	1.0275	37N	122E	76	96	02m27s
-2884-Jan-21	04:34:44	70416	8262	-60407	-15	A	p-	0.6653	0.9423	18N	42E	48	285	07m27s
-2884-Jul-15	14:48:57	70401	8259	-60401	-10	T	p-	-0.4969	1.0662	6S	113W	60	249	06m18s
-2883-Jan-09	04:37:56	70387	8256	-60395	-5	P	t-	1.3804	0.3163	66N	36E	0		
-2883-Jun-05	23:35:46	70375	8254	-60390	-38	P	-t	1.3448	0.3594	69N	32W	0		
-2883-Jul-05	07:36:30	70372	8253	-60389	0	P	t-	-1.2196	0.5967	67S	3W	0		
-2883-Nov-29	14:10:58	70360	8251	-60384	-33	A	-p	-0.8948	0.9644	76S	148W	26	291	02m25s
-2882-May-26	10:23:30	70345	8248	-60378	-28	A	-p	0.6279	0.9876	52N	59W	51	56	01m04s
-2882-Nov-19	01:15:07	70331	8245	-60372	-23	T	-n	-0.1705	1.0254	23S	90E	80	87	02m21s
-2881-May-15	14:04:17	70316	8242	-60366	-18	A	nn	-0.1441	0.9537	3N	98W	82	171	06m00s
-2881-Nov-08	16:29:27	70302	8239	-60360	-13	T	n-	0.4952	1.0432	19N	127W	60	165	03m51s
-2880-May-03	14:44:37	70287	8236	-60354	-8	A	t-	-0.9068	0.9498	54S	82W	24	435	04m34s
-2880-Oct-28	07:16:33	70273	8233	-60348	-3	P	t-	1.1831	0.6591	71N	78E	0		
-2879-Mar-24	09:43:58	70261	8231	-60343	-36	P	-t	1.0399	0.9258	71N	94W	0		
-2879-Sep-18	00:40:15	70246	8228	-60337	-31	As	-t	-0.9799	0.9295	63S	68E	11	-	05m55s
-2878-Mar-14	00:27:07	70232	8225	-60331	-26	T	-n	0.2630	1.0686	3N	106E	75	232	06m18s
-2878-Sep-07	00:46:17	70217	8222	-60325	-21	A	-n	-0.2978	0.9235	2S	98E	73	302	10m41s
-2877-Mar-03	17:25:23	70203	8219	-60319	-16	T	p-	-0.4646	1.0644	43S	136W	62	238	04m58s
-2877-Aug-27	01:26:21	70188	8216	-60313	-11	A	p-	0.4102	0.9507	42N	97E	66	198	05m06s
-2876-Jan-22	20:02:48	70176	8214	-60308	-44	P	-t	1.5097	0.0771	66N	179E	0		
-2876-Feb-21	07:57:21	70174	8213	-60307	-6	P	t-	-1.2335	0.5674	69S	149E	0		
-2876-Aug-15	08:51:33	70159	8210	-60301	-1	P	t-	1.1008	0.8077	68N	143E	0		
-2875-Jan-10	23:54:11	70147	8208	-60296	-34	A	-p	0.8479	0.9271	34N	123E	32	517	08m48s
-2875-Jul-06	14:54:37	70133	8205	-60290	-29	T	-p	-0.8142	1.0659	30S	104W	35	370	05m35s
-2875-Dec-30	23:18:07	70118	8202	-60284	-24	A	nn	0.1512	0.9274	15S	126E	81	276	09m48s
-2874-Jun-26	07:22:01	70104	8199	-60278	-19	T	nn	-0.0920	1.0525	17N	0E	85	175	04m54s
-2874-Dec-20	01:48:10	70089	8196	-60272	-14	A	p-	-0.5505	0.9612	54S	70E	56	168	03m21s
-2873-Jun-15	19:27:18	70075	8193	-60266	-9	A	p-	0.6953	0.9957	60N	150E	46	21	00m19s
-2873-Nov-09	23:55:53	70063	8191	-60261	-42	P	-t	1.5141	0.0458	61N	177W	0		

-2873-Dec-09	11:29:15	70060	8190	-60260	-4	P	t-	-1.2050	0.6199	62S	166E	0		
-2872-May-05	09:52:15	70048	8188	-60255	-37	P	-t	-1.3290	0.3999	61S	39E	0		
-2872-Jun-04	00:25:01	70046	8188	-60254	1	Pb	t-	1.5060	0.0938	62N	24W	0		
-2872-Oct-29	15:32:15	70034	8185	-60249	-32	T	-p	0.8603	1.0329	45N	86W	30	213	02m20s
-2871-Apr-24	11:04:37	70019	8182	-60243	-27	A	-p	-0.5529	0.9651	25S	37W	56	148	03m32s
-2871-Oct-19	05:20:53	70005	8179	-60237	-22	H	-n	0.2016	1.0018	9N	37E	78	6	00m10s
-2870-Apr-13	18:03:34	69990	8176	-60231	-17	T	n-	0.2439	1.0175	12N	165W	76	61	01m36s
-2870-Oct-08	13:07:31	69976	8173	-60225	-12	A	p-	-0.5150	0.9463	24S	101W	59	227	05m30s
-2869-Apr-03	07:51:50	69961	8171	-60219	-7	T	t-	0.9804	1.0515	57N	66W	11	898	03m07s
-2869-Sep-27	14:00:52	69947	8168	-60213	-2	P	t-	-1.2257	0.5745	61S	174W	0		
-2868-Feb-22	17:15:27	69935	8165	-60208	-35	T	-p	-0.8513	1.0459	67S	91W	31	291	02m44s
-2868-Aug-16	21:43:34	69920	8162	-60202	-30	P	-t	1.0469	0.8901	63N	76W	0		
-2867-Feb-11	06:12:28	69906	8159	-60196	-25	A	nn	-0.1320	1.0000	28S	26E	82	0	00m00s
-2867-Aug-06	07:23:07	69891	8156	-60190	-20	T	-n	0.2729	1.0272	38N	5E	74	96	02m21s
-2866-Jan-31	11:57:57	69877	8153	-60184	-15	A	p-	0.6278	0.9438	15N	73W	51	264	07m12s
-2866-Jul-26	22:42:46	69862	8151	-60178	-10	T	p-	-0.4481	1.0644	3S	125E	63	235	06m05s
-2865-Jan-20	12:01:12	69848	8148	-60172	-5	P	t-	1.3482	0.3697	65N	87W	0		
-2865-Jun-17	06:51:56	69836	8145	-60167	-38	P	-t	1.4163	0.2262	68N	156W	0		
-2865-Jul-16	15:17:55	69833	8145	-60166	0	P	t-	-1.1685	0.6935	66S	131W	0		
-2865-Dec-10	22:31:59	69821	8142	-60161	-33	A	-p	-0.8964	0.9690	80S	83E	26	255	02m02s
-2864-Jun-05	17:07:41	69807	8139	-60155	-28	A	-p	0.7085	0.9818	62N	165W	45	92	01m28s
-2864-Nov-29	10:00:39	69792	8137	-60149	-23	T	-n	-0.1698	1.0288	27S	43W	80	99	02m38s
-2863-May-25	20:20:30	69778	8134	-60143	-18	Am	nn	-0.0555	0.9519	12N	164E	87	176	06m16s
-2863-Nov-19	01:23:15	69763	8131	-60137	-13	T	n-	0.4974	1.0434	16N	96E	60	166	03m58s
-2862-May-14	21:04:15	69749	8128	-60131	-8	A	p-	-0.8180	0.9538	42S	170E	35	291	04m47s
-2862-Nov-08	16:01:34	69734	8125	-60125	-3	P	t-	1.1889	0.6481	71N	70W	0		
-2861-Apr-04	16:53:33	69722	8122	-60120	-36	P	-t	1.1060	0.8050	71N	142E	0		
-2861-May-04	02:32:26	69720	8122	-60119	2	Pb	t-	-1.5345	0.0206	71S	140E	0		
-2861-Sep-29	08:37:29	69708	8120	-60114	-31	As	-t	-0.9928	0.9239	69S	73W	5	-	05m52s
-2860-Mar-24	08:00:24	69693	8117	-60108	-26	T	-n	0.3265	1.0723	10N	12W	71	248	06m27s
-2860-Sep-17	08:24:05	69679	8114	-60102	-21	A	-n	-0.3180	0.9210	7S	19W	71	314	10m47s
-2859-Mar-14	01:05:13	69665	8111	-60096	-16	T	n-	-0.4068	1.0661	35S	106E	66	236	05m20s
-2859-Sep-06	09:11:18	69650	8108	-60090	-11	A	p-	0.3846	0.9504	37N	20W	67	197	05m16s

-2858-Feb-02	03:43:34	69638	8105	-60085	-44	P	-t	1.5501	0.0055	67N	50E	0		
-2858-Mar-03	15:26:52	69636	8105	-60084	-6	P	t-	-1.1843	0.6574	70S	22E	0		
-2858-Aug-26	16:53:28	69621	8102	-60078	-1	P	t-	1.0692	0.8651	69N	9E	0		
-2857-Jan-22	07:21:14	69609	8100	-60073	-34	A	-p	0.8812	0.9278	38N	5E	28	577	08m26s
-2857-Jul-17	22:41:54	69595	8097	-60067	-29	T	-p	-0.8677	1.0612	36S	134E	30	405	05m03s
-2856-Jan-11	06:52:39	69580	8094	-60061	-24	A	nn	0.1760	0.9313	14S	10E	80	261	09m27s
-2856-Jul-06	14:52:23	69566	8091	-60055	-19	T	-n	-0.1537	1.0468	15N	114W	81	158	04m33s
-2856-Dec-30	09:52:44	69551	8088	-60049	-14	A	p-	-0.5348	0.9669	55S	48W	57	141	02m52s
-2855-Jun-26	02:25:27	69537	8085	-60043	-9	A	p-	0.6262	0.9910	59N	52E	51	41	00m43s
-2855-Nov-20	08:47:01	69525	8083	-60038	-42	P	-t	1.5108	0.0510	61N	40E	0		
-2855-Dec-19	20:02:39	69523	8082	-60037	-4	P	t-	-1.1947	0.6391	63S	26E	0		
-2854-May-16	16:05:51	69511	8080	-60032	-37	P	-t	-1.4172	0.2489	61S	66W	0		
-2854-Jun-15	06:52:06	69508	8079	-60031	1	P	t-	1.4290	0.2275	63N	132W	0		
-2854-Nov-10	00:24:49	69496	8077	-60026	-32	T	-p	0.8603	1.0318	42N	134E	30	206	02m21s
-2853-May-05	17:31:46	69482	8074	-60020	-27	A	-p	-0.6376	0.9670	27S	134W	50	150	03m21s
-2853-Oct-30	13:59:38	69467	8071	-60014	-22	A	-n	0.2009	0.9982	4N	96W	78	6	00m10s
-2852-Apr-24	01:01:30	69453	8068	-60008	-17	T	nn	0.1647	1.0225	12N	90E	80	77	02m03s
-2852-Oct-18	21:19:23	69438	8065	-60002	-12	A	p-	-0.5128	0.9425	28S	132E	59	243	05m46s
-2851-Apr-13	15:13:36	69424	8062	-59996	-7	T	t-	0.9071	1.0595	52N	164W	25	457	03m48s
-2851-Oct-07	21:52:36	69410	8060	-59990	-2	P	t-	-1.2165	0.5896	60S	57E	0		
-2850-Mar-05	00:57:20	69397	8057	-59985	-35	T	-t	-0.9081	1.0445	65S	164E	24	355	02m35s
-2850-Aug-28	05:28:23	69383	8054	-59979	-30	P	-t	1.0734	0.8439	62N	156E	0		
-2849-Feb-22	13:42:05	69369	8051	-59973	-25	A	-n	-0.1833	0.9995	28S	87W	79	2	00m03s
-2849-Aug-17	15:22:55	69354	8048	-59967	-20	T	-n	0.3072	1.0267	38N	114W	72	95	02m15s
-2848-Feb-11	19:10:16	69340	8046	-59961	-15	A	p-	0.5818	0.9454	13N	176E	54	244	06m51s
-2848-Aug-06	06:44:50	69325	8043	-59955	-10	T	n-	-0.4059	1.0620	1S	2E	66	222	05m46s
-2847-Jan-30	19:15:09	69311	8040	-59949	-5	P	t-	1.3081	0.4367	64N	152E	0		
-2847-Jun-27	14:09:55	69299	8037	-59944	-38	P	-t	1.4854	0.0992	67N	81E	0		
-2847-Jul-26	23:05:08	69297	8037	-59943	0	P	t-	-1.1226	0.7794	65S	99E	0		
-2847-Dec-21	06:49:57	69285	8034	-59938	-33	A	-p	-0.9014	0.9741	85S	42W	25	218	01m39s
-2846-Jun-16	23:53:01	69270	8032	-59932	-28	A	-p	0.7868	0.9752	72N	90E	38	144	01m51s
-2846-Dec-10	18:43:12	69256	8029	-59926	-23	T	-n	-0.1723	1.0326	30S	174W	80	112	02m57s
-2845-Jun-06	02:39:49	69241	8026	-59920	-18	A	nn	0.0303	0.9497	20N	65E	88	185	06m28s

-2845-Nov-30	10:15:40	69227	8023	-59914	-13	T	n-	0.4983	1.0440	12N	41W	60	169	04m08s
-2844-May-25	03:26:49	69212	8020	-59908	-8	A	p-	-0.7305	0.9568	31S	66E	43	228	04m56s
-2844-Nov-19	00:45:58	69198	8017	-59902	-3	P	t-	1.1949	0.6370	70N	143E	0		
-2843-Apr-15	00:01:46	69186	8015	-59897	-36	P	-t	1.1742	0.6791	71N	19E	0		
-2843-May-14	09:22:27	69184	8014	-59896	2	P	t-	-1.4517	0.1696	71S	22E	0		
-2843-Oct-09	16:39:09	69172	8012	-59891	-31	A-	-t	-1.0011	0.9524	72S	136E	0		
-2842-Apr-04	15:29:13	69157	8009	-59885	-26	T	-n	0.3941	1.0751	18N	129W	67	264	06m27s
-2842-Sep-28	16:09:55	69143	8006	-59879	-21	A	-n	-0.3316	0.9191	11S	139W	71	323	10m44s
-2841-Mar-25	08:39:04	69128	8003	-59873	-16	T	n-	-0.3446	1.0671	27S	12W	70	233	05m38s
-2841-Sep-17	17:05:26	69114	8000	-59867	-11	A	p-	0.3657	0.9506	32N	141W	68	194	05m22s
-2840-Mar-13	22:48:14	69100	7997	-59861	-6	P	t-	-1.1294	0.7578	71S	103W	0		
-2840-Sep-06	01:05:00	69085	7994	-59855	-1	P	t-	1.0447	0.9095	70N	129W	0		
-2839-Feb-01	14:36:25	69073	7992	-59850	-34	A	-t	0.9237	0.9283	45N	111W	22	710	07m50s
-2839-Jul-28	06:36:49	69059	7989	-59844	-29	T	-t	-0.9147	1.0559	43S	9E	23	461	04m26s
-2838-Jan-21	14:17:18	69045	7986	-59838	-24	A	nn	0.2094	0.9356	12S	103W	78	245	08m57s
-2838-Jul-17	22:29:26	69030	7983	-59832	-19	T	-n	-0.2091	1.0406	12N	130E	78	139	04m05s
-2837-Jan-10	17:48:59	69016	7980	-59826	-14	A	p-	-0.5113	0.9731	55S	163W	59	112	02m21s
-2837-Jul-07	09:29:24	69001	7978	-59820	-9	A	p-	0.5628	0.9856	57N	48W	55	62	01m12s
-2837-Dec-01	17:36:33	68989	7975	-59815	-42	P	-t	1.5092	0.0527	62N	104W	0		
-2837-Dec-31	04:30:42	68987	7975	-59814	-4	P	t-	-1.1797	0.6675	64S	113W	0		
-2836-May-26	22:19:55	68975	7972	-59809	-37	P	-t	-1.5043	0.1000	62S	171W	0		
-2836-Jun-25	13:22:36	68973	7972	-59808	1	P	t-	1.3547	0.3557	63N	119E	0		
-2836-Nov-20	09:17:56	68961	7969	-59803	-32	T	-p	0.8598	1.0311	39N	5W	30	202	02m24s
-2835-May-15	23:59:03	68946	7967	-59797	-27	A	-p	-0.7226	0.9683	30S	128E	44	160	03m13s
-2835-Nov-09	22:39:25	68932	7964	-59791	-22	A	-n	0.1990	0.9952	0N	131E	79	17	00m28s
-2834-May-05	07:58:47	68918	7961	-59785	-17	T	nn	0.0837	1.0268	12N	16W	85	91	02m27s
-2834-Oct-30	05:34:10	68903	7958	-59779	-12	A	p-	-0.5135	0.9394	32S	6E	59	258	05m58s
-2833-Apr-24	22:34:18	68889	7955	-59773	-7	T	p-	0.8320	1.0650	50N	90E	33	376	04m14s
-2833-Oct-19	05:48:31	68874	7952	-59767	-2	P	t-	-1.2104	0.5994	60S	72W	0		
-2832-Mar-15	08:33:26	68862	7950	-59762	-35	T	-t	-0.9693	1.0415	64S	65E	14	580	02m18s
-2832-Sep-07	13:22:24	68848	7947	-59756	-30	P	-t	1.0935	0.8088	61N	26E	0		
-2831-Mar-04	21:02:15	68834	7944	-59750	-25	A	-n	-0.2415	0.9987	28S	163E	76	5	00m07s
-2831-Aug-27	23:31:55	68819	7941	-59744	-20	T	-n	0.3347	1.0262	36N	124E	70	94	02m10s

-2830-Feb-22	02:12:03	68805	7938	-59738	-15	A	p-	0.5275	0.9470	12N	67E	58	226	06m28s
-2830-Aug-17	14:55:52	68791	7935	-59732	-10	T	n-	-0.3712	1.0594	0S	123W	68	210	05m24s
-2829-Feb-11	02:19:18	68776	7932	-59726	-5	P	t-	1.2594	0.5188	63N	34E	0		
-2829-Aug-07	07:01:03	68762	7930	-59720	0	P	t-	-1.0842	0.8501	64S	32W	0		
-2828-Jan-01	15:01:35	68750	7927	-59715	-33	A	-p	-0.9127	0.9794	89S	46W	24	183	01m16s
-2828-Jun-27	06:42:28	68735	7924	-59709	-28	A	-t	0.8608	0.9682	82N	14W	30	228	02m12s
-2828-Dec-21	03:20:45	68721	7921	-59703	-23	T	-n	-0.1796	1.0369	33S	56E	79	126	03m17s
-2827-Jun-16	09:02:54	68707	7919	-59697	-18	A	nn	0.1130	0.9471	27N	33W	83	196	06m37s
-2827-Dec-10	19:02:48	68693	7916	-59691	-13	T	n-	0.4949	1.0452	9N	176W	60	173	04m20s
-2826-Jun-05	09:53:49	68678	7913	-59685	-8	A	p-	-0.6455	0.9590	22S	38W	50	194	05m03s
-2826-Nov-30	09:27:06	68664	7910	-59679	-3	P	t-	1.1986	0.6300	69N	2W	0		
-2825-Apr-26	07:08:35	68652	7908	-59674	-36	P	-t	1.2442	0.5486	71N	104W	0		
-2825-May-25	16:15:53	68649	7907	-59673	2	P	t-	-1.3702	0.3173	70S	97W	0		
-2825-Oct-21	00:44:41	68637	7905	-59668	-31	A-	-t	-1.0057	0.9432	72S	1W	0		
-2824-Apr-14	22:54:21	68623	7902	-59662	-26	T	-p	0.4652	1.0771	27N	114E	62	280	06m19s
-2824-Oct-09	00:03:07	68609	7899	-59656	-21	A	-n	-0.3393	0.9178	16S	99E	70	330	10m37s
-2823-Apr-04	16:05:02	68594	7896	-59650	-16	T	n-	-0.2760	1.0674	19S	128W	74	228	05m52s
-2823-Sep-28	01:09:16	68580	7893	-59644	-11	A	p-	0.3540	0.9510	27N	96E	69	191	05m25s
-2822-Mar-25	06:00:12	68566	7890	-59638	-6	P	t-	-1.0676	0.8707	71S	133E	0		
-2822-Sep-17	09:25:42	68551	7887	-59632	-1	P	t-	1.0270	0.9418	71N	91E	0		
-2821-Feb-12	21:41:48	68539	7885	-59627	-34	A	-t	0.9737	0.9279	56N	132E	12	1242	06m59s
-2821-Aug-08	14:39:55	68525	7882	-59621	-29	T	-t	-0.9552	1.0501	51S	119W	17	574	03m44s
-2820-Feb-01	21:35:17	68511	7879	-59615	-24	A	nn	0.2488	0.9402	8S	145E	76	229	08m19s
-2820-Jul-28	06:11:39	68496	7876	-59609	-19	T	-n	-0.2593	1.0341	9N	12E	75	119	03m32s
-2819-Jan-21	01:39:48	68482	7874	-59603	-14	A	p-	-0.4824	0.9797	53S	82E	61	83	01m48s
-2819-Jul-17	16:38:25	68468	7871	-59597	-9	A	p-	0.5047	0.9799	54N	151W	59	83	01m46s
-2819-Dec-12	02:21:37	68456	7868	-59592	-42	P	-t	1.5119	0.0463	63N	113E	0		
-2818-Jan-10	12:51:20	68454	7868	-59591	-4	P	t-	-1.1582	0.7083	65S	110E	0		
-2818-Jul-06	20:00:06	68439	7865	-59585	1	P	t-	1.2861	0.4733	64N	7E	0		
-2818-Dec-01	18:07:13	68427	7863	-59580	-32	T	-p	0.8622	1.0309	38N	143W	30	203	02m28s
-2817-May-27	06:31:28	68413	7860	-59574	-27	A	-p	-0.8042	0.9689	34S	28E	36	183	03m08s
-2817-Nov-21	07:16:03	68399	7857	-59568	-22	A	-n	0.1989	0.9928	4S	0W	79	26	00m43s
-2816-May-15	14:59:11	68384	7854	-59562	-17	T	nn	0.0044	1.0304	12N	122W	90	103	02m48s

-2816-Nov-09	13:48:23	68370	7851	-59556	-12	A	p-	-0.5145	0.9370	37S	121W	59	270	06m06s
-2815-May-05	05:52:50	68356	7848	-59550	-7	T	p-	0.7545	1.0691	49N	17W	41	338	04m33s
-2815-Oct-29	13:48:04	68341	7845	-59544	-2	P	t-	-1.2073	0.6045	60S	157E	0		
-2814-Mar-26	16:00:21	68329	7843	-59539	-35	P	-t	-1.0375	0.9424	61S	29W	0		
-2814-Apr-24	23:13:51	68327	7843	-59538	3	Pb	t-	1.4795	0.0949	61N	19E	0		
-2814-Sep-18	21:27:02	68315	7840	-59533	-30	P	-t	1.1058	0.7875	61N	106W	0		
-2813-Mar-16	04:12:03	68301	7837	-59527	-25	A	-p	-0.3073	0.9975	27S	55E	72	9	00m14s
-2813-Sep-08	07:51:26	68286	7834	-59521	-20	T	-n	0.3541	1.0258	33N	2W	69	93	02m07s
-2812-Mar-04	09:03:40	68272	7832	-59515	-15	A	p-	0.4653	0.9486	10N	38W	62	210	06m06s
-2812-Aug-27	23:14:47	68258	7829	-59509	-10	T	n-	-0.3430	1.0566	1S	110E	70	198	05m01s
-2811-Feb-21	09:15:10	68244	7826	-59503	-5	P	t-	1.2034	0.6139	62N	81W	0		
-2811-Aug-17	15:04:20	68229	7823	-59497	0	P	t-	-1.0524	0.9077	63S	164W	0		
-2810-Jan-11	23:06:46	68217	7821	-59492	-33	A	-p	-0.9301	0.9848	84S	121W	21	150	00m54s
-2810-Jul-08	13:36:45	68203	7818	-59486	-28	A	-t	0.9295	0.9603	87N	46E	21	400	02m32s
-2809-Jan-01	11:53:04	68189	7815	-59480	-23	T	-n	-0.1920	1.0415	35S	73W	79	142	03m37s
-2809-Jun-27	15:31:21	68174	7812	-59474	-18	A	nn	0.1910	0.9443	34N	132W	79	210	06m43s
-2809-Dec-22	03:45:36	68160	7809	-59468	-13	T	n-	0.4882	1.0466	7N	50E	61	178	04m32s
-2808-Jun-15	16:27:02	68146	7806	-59462	-8	A	p-	-0.5644	0.9606	14S	142W	56	173	05m05s
-2808-Dec-10	18:03:48	68132	7803	-59456	-3	P	t-	1.1999	0.6277	68N	145W	0		
-2807-May-06	14:15:07	68120	7801	-59451	-36	P	-t	1.3149	0.4155	71N	134E	0		
-2807-Jun-04	23:13:15	68117	7801	-59450	2	P	t-	-1.2906	0.4625	69S	144E	0		
-2807-Oct-31	08:51:48	68105	7798	-59445	-31	A-	-t	-1.0082	0.9379	71S	140W	0		
-2806-Apr-26	06:17:46	68091	7795	-59439	-26	T	-p	0.5379	1.0781	35N	2W	57	298	06m04s
-2806-Oct-20	08:00:06	68077	7793	-59433	-21	A	-n	-0.3439	0.9173	21S	23W	70	333	10m25s
-2805-Apr-15	23:27:34	68062	7790	-59427	-16	T	n-	-0.2051	1.0668	11S	117E	78	223	06m00s
-2805-Oct-09	09:20:07	68048	7787	-59421	-11	A	p-	0.3472	0.9520	22N	30W	70	187	05m24s
-2804-Apr-04	13:05:08	68034	7784	-59415	-6	P	t-	-1.0009	0.9919	71S	11E	0		
-2804-Sep-27	17:54:01	68020	7781	-59409	-1	P	t-	1.0150	0.9638	71N	53W	0		
-2803-Feb-23	04:36:21	68008	7779	-59404	-34	P	-t	1.0317	0.9046	69N	7E	0		
-2803-Aug-18	22:51:46	67994	7776	-59398	-29	Ts	-t	-0.9879	1.0433	61S	106E	8	-	02m57s
-2802-Feb-12	04:42:01	67979	7773	-59392	-24	A	nn	0.2977	0.9449	3S	36E	73	213	07m34s
-2802-Aug-08	14:02:41	67965	7770	-59386	-19	T	-n	-0.3011	1.0274	5N	108W	73	98	02m54s
-2801-Feb-01	09:21:59	67951	7767	-59380	-14	A	p-	-0.4458	0.9865	49S	31W	63	53	01m13s

-2801-Jul-28	23:54:12	67936	7765	-59374	-9	A	p-	0.4532	0.9741	51N	103E	63	104	02m24s
-2801-Dec-23	11:01:58	67924	7762	-59369	-42	P	-t	1.5186	0.0322	64N	29W	0		
-2800-Jan-21	21:05:09	67922	7762	-59368	-4	P	t-	-1.1309	0.7605	66S	26W	0		
-2800-Jul-17	02:44:14	67908	7759	-59362	1	P	t-	1.2229	0.5806	65N	106W	0		
-2800-Dec-12	02:53:08	67896	7756	-59357	-32	T	-p	0.8674	1.0310	37N	79E	30	208	02m33s

28TH CENTURY BCE

In the 28th century BCE the total number of solar eclipses was 224 solar eclipses: 82 partial solar eclipses, 75 annular solar eclipses (69 central annular solar eclipses with two limits, 2 central annular solar eclipses with one limit, 4 non-central annular solar eclipses with one limit), 57 total solar eclipses (56 central total solar eclipses with two limits, 1 central total solar eclipses with one limit, 0 non-central total solar eclipses with one limit), 10 hybrid solar eclipses.

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°	°	ALT	WIDTH	DUR.
		GREATEST		S								°	km	
		ECLIPSE												
-2799-Jun-06	13:06:39	67882	7754	-59351	-27	A	-p	-0.8841	0.9686	40S	72W	28	237	03m04s
-2799-Dec-01	15:50:33	67867	7751	-59345	-22	A	-n	0.1999	0.9910	7S	132W	79	32	00m56s
-2798-May-26	22:02:14	67853	7748	-59339	-17	T	nn	-0.0738	1.0333	11N	131E	86	113	03m07s
-2798-Nov-20	22:00:47	67839	7745	-59333	-12	A	p-	-0.5146	0.9353	42S	114E	59	278	06m13s
-2797-May-16	13:13:19	67825	7742	-59327	-7	T	p-	0.6782	1.0721	48N	125W	47	315	04m49s
-2797-Nov-09	21:49:12	67810	7739	-59321	-2	P	t-	-1.2054	0.6075	61S	26E	0		
-2796-Apr-05	23:22:17	67798	7737	-59316	-35	P	-t	-1.1091	0.8062	60S	150W	0		
-2796-May-05	06:34:04	67796	7737	-59315	3	P	t-	1.4093	0.2314	61N	102W	0		

-2796-Sep-29	05:39:12	67784	7734	-59310	-30	P	-t	1.1129	0.7753	61N	120E	0		
-2795-Mar-26	11:14:15	67770	7731	-59304	-25	A	-p	-0.3784	0.9958	27S	51W	68	16	00m23s
-2795-Sep-18	16:18:49	67756	7728	-59298	-20	T	-n	0.3677	1.0256	30N	130W	68	93	02m06s
-2794-Mar-15	15:45:30	67741	7726	-59292	-15	A	p-	0.3954	0.9500	10N	140W	67	197	05m46s
-2794-Sep-08	07:42:36	67727	7723	-59286	-10	T	n-	-0.3222	1.0538	3S	20W	71	187	04m39s
-2793-Mar-04	16:02:52	67713	7720	-59280	-5	P	t-	1.1398	0.7228	61N	166E	0		
-2793-Aug-28	23:14:59	67699	7717	-59274	0	P	t-	-1.0271	0.9525	62S	62E	0		
-2792-Jan-23	07:04:08	67687	7715	-59269	-33	A	-p	-0.9549	0.9900	78S	123E	17	123	00m34s
-2792-Jul-18	20:37:32	67673	7712	-59263	-28	An	-t	0.9921	0.9507	71N	48W	6	-	02m49s
-2791-Jan-11	20:17:04	67658	7709	-59257	-23	T	-n	-0.2118	1.0464	36S	162E	78	158	03m57s
-2791-Jul-07	22:06:16	67644	7706	-59251	-18	A	nn	0.2635	0.9411	39N	129E	75	226	06m47s
-2790-Jan-01	12:20:30	67630	7703	-59245	-13	T	n-	0.4751	1.0485	5N	82W	62	183	04m44s
-2790-Jun-26	23:07:44	67616	7701	-59239	-8	A	p-	-0.4886	0.9616	7S	113E	61	159	05m05s
-2790-Dec-22	02:33:02	67601	7698	-59233	-3	P	t-	1.1957	0.6352	67N	73E	0		
-2789-May-17	21:23:42	67590	7695	-59228	-36	P	-t	1.3847	0.2834	70N	11E	0		
-2789-Jun-16	06:17:22	67587	7695	-59227	2	P	t-	-1.2151	0.6010	68S	24E	0		
-2789-Nov-11	17:00:08	67575	7693	-59222	-31	A-	-t	-1.0094	0.9353	71S	82E	0		
-2788-May-06	13:38:54	67561	7690	-59216	-26	T	-p	0.6128	1.0781	44N	119W	52	318	05m42s
-2788-Oct-30	16:01:48	67547	7687	-59210	-21	A	-n	-0.3449	0.9174	26S	147W	70	333	10m09s
-2787-Apr-26	06:45:02	67533	7684	-59204	-16	T	nn	-0.1302	1.0654	3S	2E	83	216	06m00s
-2787-Oct-19	17:37:22	67518	7681	-59198	-11	A	n-	0.3451	0.9534	18N	157W	70	181	05m19s
-2786-Apr-15	20:03:08	67504	7678	-59192	-6	H	p-	-0.9293	1.0019	62S	160W	21	18	00m08s
-2786-Oct-09	02:29:41	67490	7676	-59186	-1	P	t-	1.0084	0.9762	72N	162E	0		
-2785-Mar-06	11:22:43	67478	7673	-59181	-34	P	-t	1.0955	0.7969	70N	109W	0		
-2785-Aug-30	07:10:29	67464	7670	-59175	-29	P	-t	-1.0150	0.9844	69S	39W	0		
-2784-Feb-23	11:42:57	67450	7667	-59169	-24	A	-p	0.3517	0.9496	2N	73W	69	197	06m44s
-2784-Aug-18	22:00:08	67435	7665	-59163	-19	T	-n	-0.3367	1.0208	1N	129E	70	75	02m13s
-2783-Feb-11	16:56:59	67421	7662	-59157	-14	A	p-	-0.4021	0.9936	44S	144W	66	25	00m36s
-2783-Aug-08	07:17:05	67407	7659	-59151	-9	A	p-	0.4083	0.9681	47N	6W	66	126	03m06s
-2782-Jan-02	19:35:32	67395	7657	-59146	-42	P	-t	1.5312	0.0064	65N	169W	0		
-2782-Feb-01	05:10:52	67393	7656	-59145	-4	P	t-	-1.0963	0.8268	67S	161W	0		
-2782-Jul-28	09:37:26	67379	7653	-59139	1	P	t-	1.1668	0.6750	66N	138E	0		
-2782-Dec-23	11:31:35	67367	7651	-59134	-32	T	-p	0.8786	1.0312	37N	56W	28	219	02m37s

-2781-Jun-17	19:50:41	67353	7648	-59128	-27	A	-t	-0.9575	0.9670	49S	174W	16	414	03m01s
-2781-Dec-13	00:19:08	67338	7645	-59122	-22	A	-n	0.2050	0.9896	9S	99E	78	37	01m07s
-2780-Jun-06	05:09:55	67324	7643	-59116	-17	Tm	nn	-0.1490	1.0354	10N	23E	81	120	03m24s
-2780-Dec-01	06:09:21	67310	7640	-59110	-12	A	p-	-0.5122	0.9343	46S	9W	59	283	06m17s
-2779-May-26	20:35:02	67296	7637	-59104	-7	T	p-	0.6028	1.0739	48N	127E	53	298	05m02s
-2779-Nov-20	05:49:06	67281	7634	-59098	-2	P	t-	-1.2024	0.6126	61S	105W	0		
-2778-Apr-17	06:37:29	67270	7632	-59093	-35	P	-t	-1.1855	0.6610	60S	90E	0		
-2778-May-16	13:52:50	67267	7631	-59092	3	P	t-	1.3381	0.3694	61N	138E	0		
-2778-Oct-10	13:59:52	67255	7629	-59087	-30	P	-t	1.1140	0.7738	60N	16W	0		
-2777-Apr-06	18:08:16	67241	7626	-59081	-25	A	-p	-0.4552	0.9934	27S	155W	63	25	00m36s
-2777-Sep-30	00:53:49	67227	7623	-59075	-20	T	-n	0.3758	1.0257	26N	99E	68	94	02m07s
-2776-Mar-25	22:19:17	67213	7620	-59069	-15	A	pn	0.3192	0.9511	9N	120E	71	187	05m30s
-2776-Sep-18	16:17:50	67199	7618	-59063	-10	T	n-	-0.3075	1.0510	5S	152W	72	177	04m19s
-2775-Mar-14	22:41:50	67185	7615	-59057	-5	P	t-	1.0683	0.8460	61N	55E	0		
-2775-Sep-08	07:33:19	67170	7612	-59051	0	P	t-	-1.0088	0.9839	61S	74W	0		
-2774-Feb-02	14:54:25	67158	7610	-59046	-33	A	-t	-0.9863	0.9942	70S	13E	8	140	00m19s
-2774-Jul-30	03:45:05	67144	7607	-59040	-28	P	-t	1.0479	0.8843	64N	163W	0		
-2773-Jan-23	04:34:19	67130	7604	-59034	-23	T	-n	-0.2376	1.0513	37S	38E	76	175	04m14s
-2773-Jul-19	04:49:37	67116	7601	-59028	-18	A	-p	0.3290	0.9379	43N	29E	71	245	06m51s
-2772-Jan-12	20:49:15	67102	7598	-59022	-13	T	n-	0.4571	1.0505	3N	147E	63	188	04m55s
-2772-Jul-07	05:56:04	67087	7595	-59016	-8	A	p-	-0.4179	0.9622	1S	8E	65	150	05m00s
-2771-Jan-01	10:55:38	67073	7593	-59010	-3	P	t-	1.1870	0.6510	66N	65W	0		
-2771-May-28	04:35:21	67062	7590	-59005	-36	P	-t	1.4529	0.1540	70N	112W	0		
-2771-Jun-26	13:28:35	67059	7590	-59004	2	P	t-	-1.1439	0.7317	67S	97W	0		
-2771-Nov-22	01:05:09	67047	7587	-58999	-31	A-	-t	-1.0125	0.9297	70S	55W	0		
-2770-May-17	21:01:22	67033	7585	-58993	-26	T	-p	0.6867	1.0771	54N	124E	46	343	05m15s
-2770-Nov-11	00:03:53	67019	7582	-58987	-21	A	-n	-0.3460	0.9182	30S	91E	70	330	09m50s
-2769-May-07	14:01:24	67005	7579	-58981	-16	Tm	nn	-0.0552	1.0632	6N	111W	87	207	05m52s
-2769-Oct-31	01:57:24	66991	7576	-58975	-11	A	n-	0.3444	0.9555	13N	75E	70	172	05m10s
-2768-Apr-26	02:56:41	66976	7573	-58969	-6	H	p-	-0.8548	1.0016	51S	79E	31	10	00m08s
-2768-Oct-19	11:10:13	66962	7571	-58963	-1	P	t-	1.0055	0.9822	72N	16E	0		
-2767-Mar-16	17:57:52	66950	7568	-58958	-34	P	-t	1.1676	0.6746	71N	137E	0		
-2767-Sep-09	15:38:11	66936	7565	-58952	-29	P	-t	-1.0345	0.9456	70S	179E	0		

-2766-Mar-05	18:34:07	66922	7563	-58946	-24	A	-p	0.4143	0.9541	9N	180E	65	183	05m53s
-2766-Aug-30	06:06:12	66908	7560	-58940	-19	H	-n	-0.3642	1.0143	4S	4E	69	53	01m31s
-2765-Feb-23	00:23:57	66894	7557	-58934	-14	H	p-	-0.3507	1.0006	38S	103E	69	2	00m03s
-2765-Aug-19	14:48:30	66880	7554	-58928	-9	A	n-	0.3714	0.9622	42N	119W	68	148	03m51s
-2764-Feb-12	13:09:17	66865	7551	-58922	-4	P	t-	-1.0554	0.9059	68S	66E	0		
-2764-Aug-07	16:38:34	66851	7549	-58916	1	P	t-	1.1171	0.7579	67N	20E	0		
-2763-Jan-02	20:04:37	66840	7546	-58911	-32	T	-p	0.8938	1.0315	39N	170E	26	238	02m39s
-2763-Jun-28	02:40:53	66825	7543	-58905	-27	P	-t	-1.0264	0.9305	64S	88E	0		
-2763-Dec-23	08:41:01	66811	7541	-58899	-22	A	-n	0.2147	0.9887	11S	28W	78	41	01m15s
-2762-Jun-17	12:23:22	66797	7538	-58893	-17	T	nn	-0.2202	1.0369	9N	87W	77	127	03m38s
-2762-Dec-12	14:13:18	66783	7535	-58887	-12	A	p-	-0.5071	0.9339	49S	130W	59	285	06m19s
-2761-Jun-07	04:00:10	66769	7532	-58881	-7	T	p-	0.5299	1.0748	48N	19E	58	285	05m13s
-2761-Dec-01	13:46:45	66755	7529	-58875	-2	P	t-	-1.1975	0.6209	62S	124E	0		
-2760-Apr-27	13:49:40	66743	7527	-58870	-35	P	-t	-1.2633	0.5136	61S	29W	0		
-2760-May-26	21:12:20	66740	7527	-58869	3	P	t-	1.2681	0.5046	62N	17E	0		
-2760-Oct-20	22:25:03	66729	7524	-58864	-30	P	-t	1.1124	0.7771	60N	153W	0		
-2759-Apr-17	00:55:22	66714	7521	-58858	-25	A	-p	-0.5367	0.9905	27S	102E	57	39	00m53s
-2759-Oct-10	09:34:42	66700	7519	-58852	-20	T	-n	0.3795	1.0262	21N	34W	68	95	02m11s
-2758-Apr-06	04:46:06	66686	7516	-58846	-15	A	nn	0.2377	0.9518	9N	22E	76	181	05m21s
-2758-Sep-30	00:58:52	66672	7513	-58840	-10	T	n-	-0.2978	1.0486	9S	75E	73	168	04m02s
-2757-Mar-26	05:15:30	66658	7510	-58834	-5	An	t-	0.9918	0.9399	59N	43W	6	-	04m38s
-2757-Sep-19	15:58:33	66644	7507	-58828	0	Ts	p-	-0.9969	1.0053	60S	152E	2	-	00m20s
-2756-Feb-13	22:36:48	66632	7505	-58823	-33	P	-t	-1.0251	0.9484	63S	101W	0		
-2756-Aug-09	11:00:09	66618	7502	-58817	-28	P	-t	1.0967	0.7984	63N	76E	0		
-2755-Feb-02	12:42:52	66604	7499	-58811	-23	T	-n	-0.2713	1.0562	38S	84W	74	193	04m31s
-2755-Jul-29	11:42:20	66590	7497	-58805	-18	A	-p	0.3868	0.9345	46N	72W	67	265	06m57s
-2754-Jan-23	05:07:33	66575	7494	-58799	-13	T	n-	0.4306	1.0527	2N	20E	64	193	05m03s
-2754-Jul-18	12:55:04	66561	7491	-58793	-8	A	p-	-0.3550	0.9624	3N	100W	69	145	04m54s
-2753-Jan-12	19:09:03	66547	7488	-58787	-3	P	t-	1.1714	0.6794	65N	159E	0		
-2753-Jun-08	11:50:57	66536	7486	-58782	-36	P	-t	1.5183	0.0294	69N	125E	0		
-2753-Jul-07	20:47:33	66533	7485	-58781	2	P	t-	-1.0780	0.8531	66S	140E	0		
-2753-Dec-03	09:07:30	66521	7483	-58776	-31	A-	-t	-1.0173	0.9216	69S	170E	0		
-2752-May-28	04:24:27	66507	7480	-58770	-26	T	-p	0.7602	1.0750	63N	7E	40	375	04m45s

-2752-Nov-21	08:06:44	66493	7477	-58764	-21	A	-n	-0.3465	0.9198	34S	32W	70	324	09m27s
-2751-May-17	21:14:36	66479	7475	-58758	-16	T	nn	0.0218	1.0601	14N	136E	89	198	05m35s
-2751-Nov-10	10:20:53	66465	7472	-58752	-11	A	n-	0.3459	0.9583	9N	54W	70	161	04m56s
-2750-May-07	09:46:35	66451	7469	-58746	-6	H	p-	-0.7784	1.0000	40S	34W	39	0	00m00s
-2750-Oct-30	19:53:55	66437	7466	-58740	-1	P	t-	1.0047	0.9846	71N	132W	0		
-2749-Mar-28	00:27:40	66425	7464	-58735	-34	P	-t	1.2433	0.5458	71N	24E	0		
-2749-Sep-21	00:12:33	66411	7461	-58729	-29	P	-t	-1.0485	0.9176	71S	35E	0		
-2748-Mar-16	01:20:24	66397	7458	-58723	-24	A	-p	0.4814	0.9585	17N	73E	61	171	05m02s
-2748-Sep-09	14:18:26	66383	7456	-58717	-19	H	-p	-0.3857	1.0081	8S	122W	67	30	00m51s
-2747-Mar-05	07:45:14	66369	7453	-58711	-14	H	n-	-0.2936	1.0075	31S	10W	73	27	00m44s
-2747-Aug-29	22:27:46	66354	7450	-58705	-9	A	n-	0.3420	0.9564	37N	125E	70	169	04m37s
-2746-Feb-22	20:59:24	66340	7447	-58699	-4	P	t-	-1.0072	0.9995	69S	66W	0		
-2746-Aug-18	23:50:22	66326	7444	-58693	1	P	t-	1.0762	0.8254	68N	102W	0		
-2745-Jan-14	04:28:29	66314	7442	-58688	-32	T	-t	0.9160	1.0316	43N	38E	23	268	02m37s
-2745-Jul-09	09:40:40	66300	7439	-58682	-27	P	-t	-1.0879	0.8220	65S	29W	0		
-2744-Jan-03	16:54:14	66286	7436	-58676	-22	A	-n	0.2306	0.9881	11S	154W	77	43	01m21s
-2744-Jun-27	19:43:57	66272	7434	-58670	-17	T	-n	-0.2859	1.0377	7N	161E	73	132	03m48s
-2744-Dec-22	22:08:50	66258	7431	-58664	-12	A	p-	-0.4955	0.9342	51S	113E	60	282	06m21s
-2743-Jun-17	11:28:45	66244	7428	-58658	-7	T	p-	0.4596	1.0746	47N	91W	62	272	05m21s
-2743-Dec-11	21:39:29	66230	7425	-58652	-2	P	t-	-1.1883	0.6363	63S	5W	0		
-2742-May-08	20:58:17	66218	7423	-58647	-35	P	-t	-1.3431	0.3632	61S	147W	0		
-2742-Jun-07	04:33:26	66216	7423	-58646	3	P	t-	1.1996	0.6360	62N	105W	0		
-2742-Nov-01	06:54:11	66204	7420	-58641	-30	P	-t	1.1084	0.7848	61N	69E	0		
-2741-Apr-28	07:37:40	66190	7417	-58635	-25	A	-p	-0.6209	0.9868	28S	1E	51	58	01m15s
-2741-Oct-21	18:21:12	66176	7415	-58629	-20	T	-n	0.3791	1.0272	17N	169W	68	99	02m18s
-2740-Apr-16	11:06:17	66162	7412	-58623	-15	A	nn	0.1510	0.9522	9N	74W	81	177	05m17s
-2740-Oct-10	09:45:59	66148	7409	-58617	-10	T	n-	-0.2933	1.0463	13S	59W	73	161	03m47s
-2739-Apr-05	11:43:36	66134	7406	-58611	-5	A	t-	0.9098	0.9481	50N	123W	24	447	04m24s
-2739-Sep-30	00:30:05	66119	7403	-58605	0	H	p-	-0.9907	1.0018	59S	22E	7	52	00m07s
-2738-Feb-24	06:11:59	66108	7401	-58600	-33	P	-t	-1.0707	0.8675	62S	133E	0		
-2738-Aug-20	18:23:41	66094	7398	-58594	-28	P	-t	1.1377	0.7267	62N	46W	0		
-2737-Feb-13	20:44:59	66080	7396	-58588	-23	T	-n	-0.3110	1.0608	37S	156E	72	210	04m45s
-2737-Aug-09	18:43:22	66066	7393	-58582	-18	A	-p	0.4379	0.9313	47N	175W	64	286	07m03s

-2736-Feb-03	13:18:57	66051	7390	-58576	-13	T	n-	0.3986	1.0548	1N	106W	67	197	05m09s
-2736-Jul-28	20:03:39	66037	7387	-58570	-8	A	p-	-0.2988	0.9624	6N	151E	73	142	04m46s
-2735-Jan-23	03:12:25	66023	7384	-58564	-3	P	t-	1.1487	0.7208	64N	25E	0		
-2735-Jul-18	04:15:42	66009	7382	-58558	2	P	t-	-1.0186	0.9625	65S	15E	0		
-2735-Dec-13	17:03:12	65998	7379	-58553	-31	P	-t	-1.0270	0.9056	68S	37E	0		
-2734-Jun-08	11:51:39	65984	7377	-58547	-26	T	-p	0.8300	1.0719	73N	114W	34	422	04m13s
-2734-Dec-02	16:05:17	65969	7374	-58541	-21	A	-n	-0.3510	0.9220	38S	152W	69	315	08m59s
-2733-May-29	04:29:51	65955	7371	-58535	-16	T	nn	0.0963	1.0562	21N	23E	84	186	05m11s
-2733-Nov-21	18:43:59	65941	7368	-58529	-11	A	n-	0.3461	0.9617	5N	177E	70	147	04m36s
-2732-May-17	16:33:33	65927	7365	-58523	-6	A	p-	-0.7003	0.9975	31S	144W	45	12	00m15s
-2732-Nov-10	04:39:47	65913	7363	-58517	-1	P	t-	1.0051	0.9850	71N	81E	0		
-2731-Apr-07	06:49:22	65901	7360	-58512	-34	P	-t	1.3249	0.4063	72N	88W	0		
-2731-May-06	21:26:26	65899	7360	-58511	4	Pb	t-	-1.5156	0.0760	71S	165W	0		
-2731-Oct-01	08:53:59	65887	7358	-58506	-29	P	-t	-1.0566	0.9010	71S	111W	0		
-2730-Mar-27	07:59:08	65873	7355	-58500	-24	A	-p	0.5554	0.9625	25N	33W	56	162	04m15s
-2730-Sep-20	22:38:51	65859	7352	-58494	-19	H	-p	-0.3997	1.0023	13S	109E	66	9	00m14s
-2729-Mar-16	15:00:23	65845	7349	-58488	-14	H	n-	-0.2304	1.0141	24S	123W	77	50	01m24s
-2729-Sep-10	06:14:02	65831	7346	-58482	-9	A	n-	0.3193	0.9510	32N	7E	71	189	05m23s
-2728-Mar-05	04:43:06	65817	7344	-58476	-4	T	t-	-0.9532	1.0480	77S	106E	17	545	02m39s
-2728-Aug-29	07:10:47	65803	7341	-58470	1	P	t-	1.0423	0.8807	69N	134E	0		
-2727-Jan-24	12:43:47	65791	7339	-58465	-32	T	-t	0.9451	1.0313	48N	93W	19	329	02m30s
-2727-Jul-19	16:49:04	65777	7336	-58459	-27	P	-t	-1.1433	0.7243	66S	149W	0		
-2726-Jan-14	00:58:46	65763	7333	-58453	-22	A	-n	0.2529	0.9877	9S	83E	75	45	01m26s
-2726-Jul-09	03:12:09	65749	7330	-58447	-17	T	-n	-0.3462	1.0379	4N	47E	70	135	03m53s
-2725-Jan-03	05:56:28	65735	7327	-58441	-12	A	p-	-0.4780	0.9350	52S	1W	61	276	06m23s
-2725-Jun-28	19:03:29	65721	7325	-58435	-7	T	p-	0.3944	1.0737	45N	158E	67	260	05m28s
-2725-Dec-23	05:27:30	65707	7322	-58429	-2	P	t-	-1.1750	0.6586	64S	134W	0		
-2724-May-19	04:05:18	65695	7320	-58424	-35	P	-t	-1.4231	0.2135	61S	95E	0		
-2724-Jun-17	11:56:42	65693	7319	-58423	3	P	t-	1.1334	0.7618	63N	133E	0		
-2724-Nov-11	15:25:03	65681	7317	-58418	-30	P	-t	1.1039	0.7936	61N	70W	0		
-2723-May-08	14:16:34	65667	7314	-58412	-25	A	-p	-0.7065	0.9824	30S	99W	45	86	01m41s
-2723-Nov-01	03:09:33	65653	7311	-58406	-20	T	-n	0.3776	1.0287	13N	56E	68	104	02m29s
-2722-Apr-27	17:23:28	65639	7309	-58400	-15	A	nn	0.0623	0.9520	8N	169W	86	176	05m21s

-2722-Oct-21	18:36:35	65625	7306	-58394	-10	T	n-	-0.2921	1.0446	17S	165E	73	155	03m36s
-2721-Apr-16	18:09:28	65611	7303	-58388	-5	A	p-	0.8250	0.9536	47N	146E	34	291	04m02s
-2721-Oct-11	09:05:26	65597	7300	-58382	0	A	p-	-0.9884	0.9977	59S	115W	8	59	00m09s
-2720-Mar-06	13:40:43	65586	7298	-58377	-33	P	-t	-1.1224	0.7742	61S	10E	0		
-2720-Apr-04	23:45:19	65583	7298	-58376	5	Pb	t-	1.5366	0.0180	61N	15E	0		
-2720-Aug-31	01:55:33	65571	7295	-58371	-28	P	-t	1.1712	0.6686	62N	170W	0		
-2719-Feb-24	04:37:09	65558	7292	-58365	-23	T	-n	-0.3594	1.0652	37S	39E	69	228	04m57s
-2719-Aug-20	01:55:41	65544	7290	-58359	-18	A	-p	0.4797	0.9282	47N	79E	61	306	07m13s
-2718-Feb-13	21:19:40	65530	7287	-58353	-13	T	n-	0.3580	1.0567	0S	131E	69	200	05m12s
-2718-Aug-09	03:23:43	65516	7284	-58347	-8	A	n-	-0.2514	0.9622	8N	39E	75	141	04m37s
-2717-Feb-03	11:05:29	65501	7281	-58341	-3	P	t-	1.1184	0.7757	63N	105W	0		
-2717-Jul-29	11:53:54	65487	7279	-58335	2	T	t-	-0.9666	1.0081	51S	103W	14	112	00m40s
-2717-Dec-25	00:53:30	65476	7276	-58330	-31	P	-t	-1.0406	0.8835	67S	94W	0		
-2716-Jun-18	19:20:58	65462	7274	-58324	-26	T	-t	0.8980	1.0675	83N	110E	26	509	03m40s
-2716-Dec-13	00:01:47	65448	7271	-58318	-21	A	-n	-0.3574	0.9250	42S	89E	69	303	08m27s
-2715-Jun-08	11:45:14	65434	7268	-58312	-16	T	-n	0.1700	1.0514	29N	89W	80	173	04m40s
-2715-Dec-02	03:05:58	65420	7265	-58306	-11	A	n-	0.3446	0.9658	2N	49E	70	131	04m09s
-2714-May-28	23:20:25	65406	7262	-58300	-6	A	p-	-0.6230	0.9942	22S	108E	51	26	00m38s
-2714-Nov-21	13:25:51	65392	7260	-58294	-1	P	t-	1.0051	0.9865	70N	66W	0		
-2713-Apr-18	13:08:05	65380	7257	-58289	-34	P	-t	1.4081	0.2640	72N	161E	0		
-2713-May-18	03:45:24	65378	7257	-58288	4	P	t-	-1.4332	0.2190	70S	85E	0		
-2713-Oct-12	17:39:00	65366	7255	-58283	-29	P	-t	-1.0615	0.8906	72S	101E	0		
-2712-Apr-06	14:35:41	65352	7252	-58277	-24	A	-p	0.6316	0.9661	35N	138W	51	156	03m32s
-2712-Oct-01	07:03:54	65338	7249	-58271	-19	A	-p	-0.4088	0.9969	18S	21W	66	12	00m19s
-2711-Mar-26	22:10:13	65324	7246	-58265	-14	T	nn	-0.1620	1.0204	16S	126E	81	70	02m03s
-2711-Sep-20	14:07:29	65310	7244	-58259	-9	A	n-	0.3035	0.9460	27N	113W	72	208	06m08s
-2710-Mar-16	12:20:13	65296	7241	-58253	-4	T	t-	-0.8935	1.0555	68S	47W	26	411	03m21s
-2710-Sep-09	14:40:20	65282	7238	-58247	1	A+	t-	1.0159	0.9234	70N	7E	0		
-2709-Feb-04	20:49:05	65270	7236	-58242	-32	T	-t	0.9818	1.0296	58N	136E	10	566	02m10s
-2709-Jul-31	00:09:08	65256	7233	-58236	-27	P	-t	-1.1898	0.6422	67S	88E	0		
-2708-Jan-25	08:52:29	65242	7230	-58230	-22	A	-n	0.2832	0.9874	7S	38W	74	46	01m29s
-2708-Jul-19	10:48:41	65228	7228	-58224	-17	T	-n	-0.4001	1.0376	0N	70W	66	138	03m54s
-2707-Jan-13	13:33:51	65214	7225	-58218	-12	A	p-	-0.4529	0.9362	51S	112W	63	267	06m26s

-2707-Jul-09	02:44:24	65201	7222	-58212	-7	T	n-	0.3345	1.0719	43N	44E	70	248	05m31s
-2706-Jan-02	13:06:38	65187	7219	-58206	-2	P	t-	-1.1545	0.6933	65S	99E	0		
-2706-May-30	11:12:10	65175	7217	-58201	-35	P	-t	-1.5019	0.0674	62S	23W	0		
-2706-Jun-28	19:24:41	65173	7217	-58200	3	P	t-	1.0719	0.8776	64N	9E	0		
-2706-Nov-22	23:56:42	65161	7214	-58195	-30	P	-t	1.0990	0.8032	62N	151E	0		
-2705-May-19	20:52:55	65147	7211	-58189	-25	A	-p	-0.7928	0.9773	34S	161E	37	129	02m12s
-2705-Nov-12	12:00:03	65133	7209	-58183	-20	T	-n	0.3748	1.0307	9N	80W	68	111	02m42s
-2704-May-07	23:37:33	65119	7206	-58177	-15	Am	nn	-0.0285	0.9515	8N	96E	88	178	05m31s
-2704-Nov-01	03:30:14	65105	7203	-58171	-10	T	n-	-0.2935	1.0433	22S	29E	73	151	03m28s
-2703-Apr-27	00:32:01	65091	7200	-58165	-5	A	p-	0.7363	0.9583	45N	53E	42	219	03m41s
-2703-Oct-21	17:45:04	65077	7198	-58159	0	A	p-	-0.9903	0.9935	61S	103E	7	187	00m24s
-2702-Mar-17	21:04:13	65065	7195	-58154	-33	P	-t	-1.1792	0.6700	61S	112W	0		
-2702-Apr-16	06:40:52	65063	7195	-58153	5	P	t-	1.4574	0.1597	60N	100W	0		
-2702-Sep-11	09:34:38	65051	7193	-58148	-28	P	-t	1.1980	0.6226	61N	64E	0		
-2701-Mar-07	12:24:03	65037	7190	-58142	-23	T	-n	-0.4127	1.0689	36S	78W	65	246	05m08s
-2701-Aug-31	09:17:14	65024	7187	-58136	-18	A	-p	0.5139	0.9254	45N	31W	59	325	07m25s
-2700-Feb-25	05:12:49	65009	7184	-58130	-13	T	n-	0.3114	1.0584	0S	11E	72	201	05m13s
-2700-Aug-19	10:53:58	64996	7182	-58124	-8	A	n-	-0.2115	0.9620	8N	76W	78	140	04m27s

27TH CENTURY BCE

In the 27th century BCE the total number of solar eclipses was 226 solar eclipses: 79 partial solar eclipses, 81 annular solar eclipses (72 central annular solar eclipses with two limits, 7 central annular solar eclipses with one limit, 2 non-central annular solar eclipses with one limit), 64 total solar eclipses (63 central total solar eclipses with two limits, 0 central total solar eclipses with one limit, 1 non-central total solar eclipses with one limit), 2 hybrid solar eclipses.

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°	°	ALT	WIDTH	DUR.
	GREATEST		S									°	km	
	ECLIPSE													
-2699-Feb-13	18:48:21	64982	7179	-58118	-3	P	t-	1.0807	0.8441	63N	128E	0		
-2699-Aug-08	19:42:20	64968	7176	-58112	2	T	t-	-0.9221	1.0104	43S	136E	22	92	00m53s
-2698-Jan-04	08:33:12	64956	7174	-58107	-31	P	-t	-1.0624	0.8478	66S	138E	0		
-2698-Jun-30	02:57:03	64942	7171	-58101	-26	T	-t	0.9604	1.0615	82N	125W	16	758	03m04s
-2698-Dec-24	07:51:35	64928	7168	-58095	-21	A	-n	-0.3702	0.9285	45S	28W	68	289	07m50s
-2697-Jun-19	19:03:52	64914	7166	-58089	-16	T	-n	0.2403	1.0461	35N	160E	76	158	04m05s
-2697-Dec-13	11:24:10	64900	7163	-58083	-11	A	n-	0.3390	0.9705	1S	79W	70	112	03m35s
-2696-Jun-08	06:07:31	64886	7160	-58077	-6	A	p-	-0.5465	0.9901	14S	1E	57	41	01m09s
-2696-Dec-01	22:09:23	64872	7157	-58071	-1	P	t-	1.0029	0.9924	69N	148E	0		
-2695-Apr-28	19:21:26	64861	7155	-58066	-34	Pe	-t	1.4947	0.1154	71N	52E	0		
-2695-May-28	10:03:08	64858	7155	-58065	4	P	t-	-1.3496	0.3634	70S	24W	0		
-2695-Oct-23	02:28:44	64847	7152	-58060	-29	P	-t	-1.0623	0.8881	72S	48W	0		
-2694-Apr-17	21:08:30	64833	7150	-58054	-24	A	-p	0.7114	0.9690	44N	116E	44	157	02m57s
-2694-Oct-12	15:33:46	64819	7147	-58048	-19	A	-p	-0.4130	0.9922	22S	152W	65	30	00m47s
-2693-Apr-07	05:16:56	64805	7144	-58042	-14	T	nn	-0.0898	1.0261	8S	15E	85	89	02m38s
-2693-Oct-01	22:07:28	64791	7141	-58036	-9	A	n-	0.2938	0.9415	22N	124E	73	226	06m51s
-2692-Mar-26	19:51:33	64777	7139	-58030	-4	T	p-	-0.8284	1.0620	59S	176W	34	362	04m05s
-2692-Sep-19	22:18:36	64763	7136	-58024	1	An	t-	0.9965	0.9074	72N	128W	2	-	06m11s
-2691-Feb-15	04:45:43	64752	7134	-58019	-32	P	-t	1.0252	0.9607	69N	1W	0		
-2691-Aug-10	07:39:24	64738	7131	-58013	-27	P	-t	-1.2288	0.5732	68S	37W	0		
-2690-Feb-04	16:35:53	64724	7128	-58007	-22	A	-p	0.3211	0.9871	3S	156W	71	48	01m32s
-2690-Jul-30	18:34:51	64710	7126	-58001	-17	T	-n	-0.4466	1.0370	3S	170E	63	139	03m49s
-2689-Jan-24	21:02:34	64696	7123	-57995	-12	A	p-	-0.4213	0.9377	48S	138E	65	256	06m29s
-2689-Jul-20	10:31:49	64682	7120	-57989	-7	T	n-	0.2802	1.0696	40N	71W	74	236	05m32s
-2688-Jan-13	20:39:17	64668	7117	-57983	-2	P	t-	-1.1284	0.7377	66S	26W	0		
-2688-Jul-09	02:57:30	64654	7115	-57977	3	P	t-	1.0152	0.9831	65N	116W	0		
-2688-Dec-03	08:25:38	64642	7112	-57972	-30	P	-t	1.0975	0.8072	62N	13E	0		
-2687-May-30	03:29:10	64629	7110	-57966	-25	A	-t	-0.8781	0.9712	40S	61E	28	211	02m46s
-2687-Nov-22	20:49:05	64615	7107	-57960	-20	T	-n	0.3736	1.0332	5N	145E	68	120	03m00s

-2686-May-19	05:52:48	64601	7104	-57954	-15	A	nn	-0.1184	0.9505	7N	2E	83	183	05m49s
-2686-Nov-12	12:22:55	64587	7101	-57948	-10	T	n-	-0.2943	1.0425	27S	107W	73	148	03m23s
-2685-May-08	06:56:28	64573	7099	-57942	-5	A	p-	0.6481	0.9622	44N	41W	49	177	03m23s
-2685-Nov-02	02:26:14	64559	7096	-57936	0	As	p-	-0.9942	0.9895	62S	42W	5	-	00m37s
-2684-Mar-28	04:21:53	64547	7094	-57931	-33	P	-t	-1.2415	0.5544	61S	128E	0		
-2684-Apr-26	13:34:19	64545	7093	-57930	5	P	t-	1.3752	0.3086	61N	146E	0		
-2684-Sep-21	17:21:54	64533	7091	-57925	-28	P	-t	1.2174	0.5894	61N	64W	0		
-2683-Mar-17	20:02:33	64520	7088	-57919	-23	T	-p	-0.4731	1.0721	35S	168E	62	264	05m17s
-2683-Sep-10	16:49:52	64506	7085	-57913	-18	A	-p	0.5394	0.9231	42N	144W	57	341	07m39s
-2682-Mar-07	12:55:48	64492	7083	-57907	-13	T	n-	0.2567	1.0596	0S	107W	75	202	05m12s
-2682-Aug-30	18:36:25	64478	7080	-57901	-8	A	n-	-0.1807	0.9619	7N	167E	80	140	04m19s
-2681-Feb-25	02:21:03	64464	7077	-57895	-3	P	t-	1.0354	0.9262	62N	4E	0		
-2681-Aug-20	03:39:52	64450	7075	-57889	2	T	t-	-0.8842	1.0116	39S	12E	28	84	01m00s
-2680-Jan-15	16:05:32	64438	7072	-57884	-31	P	-t	-1.0897	0.8028	65S	12E	0		
-2680-Jul-10	10:37:39	64425	7069	-57878	-26	P	-t	1.0191	0.9844	66N	100E	0		
-2679-Jan-03	15:35:09	64411	7067	-57872	-21	A	-p	-0.3883	0.9325	47S	142W	67	274	07m10s
-2679-Jun-30	02:25:23	64397	7064	-57866	-16	T	-n	0.3071	1.0401	41N	49E	72	141	03m27s
-2679-Dec-23	19:38:16	64383	7061	-57860	-11	A	n-	0.3292	0.9759	3S	155E	71	91	02m55s
-2678-Jun-19	12:57:31	64369	7059	-57854	-6	A	p-	-0.4734	0.9856	7S	107W	62	58	01m46s
-2678-Dec-13	06:49:29	64355	7056	-57848	-1	T+	t-	0.9973	1.0047	68N	4E	0		
-2677-Jun-08	16:24:32	64341	7053	-57842	4	P	t-	-1.2688	0.5025	69S	134W	0		
-2677-Nov-03	11:19:51	64330	7051	-57837	-29	P	-t	-1.0620	0.8879	71S	163E	0		
-2676-Apr-28	03:40:30	64316	7048	-57831	-24	A	-p	0.7925	0.9713	55N	8E	37	168	02m27s
-2676-Oct-23	00:06:26	64302	7045	-57825	-19	A	-p	-0.4142	0.9880	27S	77E	65	46	01m11s
-2675-Apr-17	12:21:24	64288	7043	-57819	-14	T	nn	-0.0147	1.0313	1N	96W	89	106	03m08s
-2675-Oct-12	06:11:47	64274	7040	-57813	-9	A	n-	0.2884	0.9376	17N	0E	73	241	07m31s
-2674-Apr-07	03:18:42	64260	7037	-57807	-4	T	p-	-0.7593	1.0673	49S	61E	40	335	04m47s
-2674-Oct-01	06:04:43	64246	7035	-57801	1	An	t-	0.9831	0.9073	72N	73E	10	-	06m52s
-2673-Feb-26	12:32:55	64235	7032	-57796	-32	P	-t	1.0758	0.8657	70N	132W	0		
-2673-Mar-27	20:30:45	64232	7032	-57795	6	Pb	t-	-1.4781	0.0987	71S	107W	0		
-2673-Aug-21	15:20:21	64221	7030	-57790	-27	P	-t	-1.2599	0.5182	69S	166W	0		
-2672-Feb-16	00:08:21	64207	7027	-57784	-22	A	-p	0.3670	0.9867	2N	87E	68	50	01m35s
-2672-Aug-10	02:30:45	64193	7024	-57778	-17	T	-p	-0.4855	1.0361	7S	48E	61	139	03m41s

-2671-Feb-04	04:18:15	64179	7021	-57772	-12	A	p-	-0.3796	0.9395	44S	30E	67	243	06m32s
-2671-Jul-30	18:27:40	64165	7019	-57766	-7	T	n-	0.2330	1.0667	37N	170E	76	224	05m28s
-2670-Jan-24	04:02:02	64151	7016	-57760	-2	P	t-	-1.0941	0.7965	67S	149W	0		
-2670-Jul-20	10:36:49	64138	7013	-57754	3	T	t-	0.9642	1.0329	80N	129E	15	439	01m42s
-2670-Dec-14	16:51:39	64126	7011	-57749	-30	P	-t	1.0990	0.8059	63N	125W	0		
-2669-Jun-10	10:06:43	64112	7008	-57743	-25	A	-t	-0.9609	0.9636	50S	37W	16	477	03m17s
-2669-Dec-04	05:37:19	64098	7006	-57737	-20	T	-n	0.3736	1.0362	2N	9E	68	131	03m21s
-2668-May-29	12:07:11	64084	7003	-57731	-15	A	nn	-0.2087	0.9490	5N	93W	78	191	06m14s
-2668-Nov-22	21:16:19	64071	7000	-57725	-10	T	n-	-0.2958	1.0422	31S	118E	73	147	03m22s
-2667-May-18	13:21:31	64057	6997	-57719	-5	A	p-	0.5595	0.9654	43N	135W	56	149	03m09s
-2667-Nov-12	11:07:33	64043	6995	-57713	0	A-	p-	-0.9990	0.9898	61S	167E	0		
-2666-Apr-08	11:36:45	64031	6992	-57708	-33	P	-t	-1.3067	0.4319	61S	8E	0		
-2666-May-07	20:29:18	64029	6992	-57707	5	P	t-	1.2928	0.4590	61N	31E	0		
-2666-Oct-03	01:15:15	64017	6990	-57702	-28	P	-t	1.2311	0.5661	60N	167E	0		
-2665-Mar-29	03:37:21	64004	6987	-57696	-23	T	-p	-0.5372	1.0746	34S	54E	57	283	05m25s
-2665-Sep-22	00:29:39	63990	6984	-57690	-18	A	-p	0.5592	0.9212	39N	100E	56	354	07m55s
-2664-Mar-17	20:32:30	63976	6982	-57684	-13	T	n-	0.1971	1.0602	0N	137E	79	201	05m09s
-2664-Sep-10	02:28:20	63962	6979	-57678	-8	A	n-	-0.1566	0.9620	5N	47E	81	139	04m10s
-2663-Mar-07	09:42:54	63948	6976	-57672	-3	A	t-	0.9820	0.9926	55N	103W	10	143	00m33s
-2663-Aug-30	11:48:00	63934	6973	-57666	2	T	p-	-0.8542	1.0123	37S	114W	31	80	01m03s
-2662-Jan-25	23:26:23	63923	6971	-57661	-31	P	-t	-1.1260	0.7425	64S	110W	0		
-2662-Jul-21	18:26:17	63909	6968	-57655	-26	P	-t	1.0710	0.8830	65N	30W	0		
-2662-Aug-20	02:48:48	63907	6968	-57654	12	Pb	t-	-1.5024	0.0578	63S	1W	0		
-2661-Jan-14	23:09:57	63895	6966	-57649	-21	A	-p	-0.4144	0.9369	48S	106E	65	258	06m28s
-2661-Jul-11	09:53:09	63881	6963	-57643	-16	T	-p	0.3680	1.0337	46N	62W	68	122	02m49s
-2660-Jan-04	03:45:59	63867	6960	-57637	-11	A	n-	0.3131	0.9818	6S	30E	72	68	02m10s
-2660-Jun-29	19:50:14	63854	6958	-57631	-6	A	p-	-0.4034	0.9804	1S	146E	66	76	02m27s
-2660-Dec-23	15:24:42	63840	6955	-57625	-1	T	t-	0.9873	1.0174	59N	140W	8	417	01m17s
-2659-Jun-18	22:48:59	63826	6952	-57619	4	P	t-	-1.1900	0.6372	68S	116E	0		
-2659-Nov-13	20:11:27	63815	6950	-57614	-29	P	-t	-1.0612	0.8889	71S	14E	0		
-2658-May-09	10:12:57	63801	6947	-57608	-24	A	-p	0.8740	0.9725	66N	106W	29	203	02m05s
-2658-Nov-03	08:41:39	63787	6945	-57602	-19	A	-p	-0.4128	0.9844	31S	54W	65	60	01m31s
-2657-Apr-28	19:24:48	63773	6942	-57596	-14	T	nn	0.0624	1.0358	9N	153E	86	121	03m31s

-2657-Oct-23	14:19:54	63759	6939	-57590	-9	A	n-	0.2867	0.9343	12N	125W	73	255	08m09s
-2656-Apr-17	10:42:34	63745	6936	-57584	-4	T	p-	-0.6869	1.0718	39S	58W	46	319	05m29s
-2656-Oct-11	13:57:31	63731	6934	-57578	1	An	p-	0.9752	0.9064	69N	66W	12	-	07m25s
-2655-Mar-08	20:10:48	63720	6932	-57573	-32	P	-t	1.1333	0.7575	70N	98E	0		
-2655-Apr-07	03:58:00	63718	6931	-57572	6	P	t-	-1.4149	0.2205	71S	125E	0		
-2655-Aug-31	23:12:17	63706	6929	-57567	-27	P	-t	-1.2829	0.4775	70S	61E	0		
-2654-Feb-26	07:31:02	63692	6926	-57561	-22	A	-p	0.4197	0.9861	8N	27W	65	54	01m38s
-2654-Aug-21	10:35:37	63679	6923	-57555	-17	T	-p	-0.5175	1.0351	11S	77W	59	138	03m30s
-2653-Feb-15	11:25:18	63665	6921	-57549	-12	A	nn	-0.3314	0.9414	39S	77W	70	230	06m36s
-2653-Aug-11	02:31:35	63651	6918	-57543	-7	T	n-	0.1928	1.0634	33N	49E	79	212	05m21s
-2652-Feb-04	11:16:39	63637	6915	-57537	-2	P	t-	-1.0525	0.8681	68S	89E	0		
-2652-Jul-30	18:22:28	63623	6913	-57531	3	T	p-	0.9193	1.0293	89N	65W	23	258	01m38s
-2652-Dec-25	01:12:23	63612	6910	-57526	-30	P	-t	1.1056	0.7957	64N	98E	0		
-2651-Jun-20	16:47:37	63598	6908	-57520	-25	P	-t	-1.0396	0.9035	63S	132W	0		
-2651-Dec-14	14:19:55	63584	6905	-57514	-20	T	-n	0.3786	1.0397	0N	124W	68	143	03m45s
-2650-Jun-09	18:26:40	63570	6902	-57508	-15	A	np	-0.2944	0.9470	3N	171E	73	203	06m46s
-2650-Dec-04	06:05:56	63557	6900	-57502	-10	T	n-	-0.2949	1.0423	35S	15W	73	148	03m23s
-2649-May-29	19:50:09	63543	6897	-57496	-5	A	p-	0.4729	0.9680	42N	130E	62	130	03m00s
-2649-Nov-23	19:46:48	63529	6894	-57490	0	P	p-	-1.0029	0.9816	62S	26E	0		
-2648-Apr-18	18:48:30	63517	6892	-57485	-33	P	-t	-1.3750	0.3025	61S	111W	0		
-2648-May-18	03:25:25	63515	6891	-57484	5	P	t-	1.2102	0.6111	61N	84W	0		
-2648-Oct-13	09:14:22	63504	6889	-57479	-28	P	-t	1.2399	0.5513	60N	36E	0		
-2647-Apr-08	11:05:01	63490	6887	-57473	-23	T	-p	-0.6074	1.0761	34S	59W	52	305	05m30s
-2647-Oct-02	08:19:09	63476	6884	-57467	-18	A	-p	0.5715	0.9199	35N	20W	55	362	08m12s
-2646-Mar-29	04:01:07	63462	6881	-57461	-13	T	nn	0.1311	1.0602	1N	24E	82	199	05m05s
-2646-Sep-21	10:29:56	63448	6878	-57455	-8	A	nn	-0.1396	0.9623	2N	76W	82	138	04m00s
-2645-Mar-18	16:56:11	63435	6876	-57449	-3	A	p-	0.9224	0.9951	48N	155E	22	43	00m23s
-2645-Sep-10	20:05:25	63421	6873	-57443	2	T	p-	-0.8312	1.0128	37S	117E	34	78	01m04s
-2644-Feb-06	06:38:01	63409	6871	-57438	-31	P	-t	-1.1693	0.6704	63S	130E	0		
-2644-Aug-01	02:21:00	63396	6868	-57432	-26	P	-t	1.1177	0.7922	64N	161W	0		
-2644-Aug-30	11:08:01	63393	6868	-57431	12	P	t-	-1.4747	0.1117	62S	137W	0		
-2643-Jan-25	06:37:43	63382	6865	-57426	-21	A	-p	-0.4468	0.9417	49S	3W	63	241	05m46s
-2643-Jul-21	17:26:16	63368	6863	-57420	-16	T	-p	0.4236	1.0269	49N	173W	65	101	02m11s

-2642-Jan-14	11:47:10	63354	6860	-57414	-11	A	n-	0.2905	0.9881	7S	92W	73	44	01m23s
-2642-Jul-11	02:48:57	63340	6857	-57408	-6	A	n-	-0.3390	0.9750	4N	39E	70	95	03m09s
-2641-Jan-03	23:54:51	63327	6855	-57402	-1	T	t-	0.9724	1.0236	53N	83E	13	359	01m49s
-2641-Jun-30	05:18:31	63313	6852	-57396	4	P	t-	-1.1150	0.7646	67S	5E	0		
-2641-Nov-25	05:01:24	63301	6850	-57391	-29	P	-t	-1.0617	0.8876	70S	133W	0		
-2640-May-19	16:48:10	63288	6847	-57385	-24	A	-t	0.9541	0.9724	76N	115E	17	340	01m49s
-2640-Nov-13	17:15:35	63274	6844	-57379	-19	A	-p	-0.4116	0.9815	36S	176E	65	72	01m47s
-2639-May-09	02:28:48	63260	6842	-57373	-14	Tm	nn	0.1398	1.0395	18N	43E	82	134	03m47s
-2639-Nov-02	22:29:15	63246	6839	-57367	-9	A	n-	0.2866	0.9318	8N	110E	73	266	08m44s
-2638-Apr-28	18:05:23	63233	6836	-57361	-4	T	p-	-0.6133	1.0751	30S	176W	52	306	06m06s
-2638-Oct-22	21:54:02	63219	6834	-57355	1	An	p-	0.9701	0.9059	66N	161E	13	-	07m54s
-2637-Mar-20	03:40:59	63207	6831	-57350	-32	P	-t	1.1963	0.6387	71N	30W	0		
-2637-Apr-18	11:21:34	63205	6831	-57349	6	P	t-	-1.3489	0.3479	71S	2W	0		
-2637-Sep-12	07:14:46	63194	6829	-57344	-27	P	-t	-1.2982	0.4503	70S	74W	0		
-2636-Mar-08	14:42:06	63180	6826	-57338	-22	A	-p	0.4813	0.9851	15N	140W	61	60	01m42s
-2636-Aug-31	18:50:48	63166	6823	-57332	-17	T	-p	-0.5416	1.0341	16S	155E	57	136	03m17s
-2635-Feb-25	18:20:14	63152	6821	-57326	-12	A	nn	-0.2734	0.9433	32S	177E	74	218	06m39s
-2635-Aug-21	10:44:42	63139	6818	-57320	-7	T	n-	0.1603	1.0599	29N	76W	81	200	05m10s
-2634-Feb-14	18:21:06	63125	6815	-57314	-2	A-	t-	-1.0018	0.9559	69S	31W	0		
-2634-Aug-11	02:16:19	63111	6813	-57308	3	T	p-	0.8816	1.0246	82N	85E	28	180	01m28s
-2633-Jan-05	09:28:32	63100	6810	-57303	-30	P	-t	1.1167	0.7772	65N	38W	0		
-2633-Jul-01	23:31:16	63086	6808	-57297	-25	P	-t	-1.1149	0.7703	64S	116E	0		
-2633-Dec-25	22:59:28	63072	6805	-57291	-20	T	-n	0.3867	1.0435	1S	104E	67	157	04m11s
-2632-Jun-20	00:49:05	63058	6802	-57285	-15	A	-p	-0.3775	0.9447	0N	74E	68	219	07m22s
-2632-Dec-14	14:51:53	63044	6800	-57279	-10	T	n-	-0.2907	1.0430	37S	147W	73	150	03m27s
-2631-Jun-09	02:23:19	63031	6797	-57273	-5	A	p-	0.3886	0.9700	41N	34E	67	116	02m54s
-2631-Dec-04	04:23:06	63017	6794	-57267	0	P	p-	-1.0052	0.9766	62S	114W	0		
-2630-Apr-30	02:00:46	63006	6792	-57262	-33	P	-t	-1.4438	0.1711	61S	130E	0		
-2630-May-29	10:26:19	63003	6792	-57261	5	P	t-	1.1298	0.7598	62N	160E	0		
-2630-Oct-24	17:15:38	62992	6789	-57256	-28	P	-t	1.2465	0.5401	60N	95W	0		
-2629-Apr-19	18:31:44	62978	6787	-57250	-23	T	-p	-0.6789	1.0767	34S	171W	47	332	05m33s
-2629-Oct-13	16:14:08	62964	6784	-57244	-18	A	-p	0.5797	0.9192	31N	142W	54	367	08m30s
-2628-Apr-08	11:23:57	62951	6781	-57238	-13	Tm	nn	0.0606	1.0595	1N	89W	87	196	05m00s

-2628-Oct-01	18:39:54	62937	6779	-57232	-8	A	nn	-0.1285	0.9631	1S	159E	83	135	03m50s
-2627-Mar-29	00:00:40	62923	6776	-57226	-3	A	p-	0.8563	0.9959	44N	50E	31	27	00m20s
-2627-Sep-21	04:31:34	62909	6773	-57220	2	T	p-	-0.8147	1.0134	38S	14W	35	77	01m04s
-2626-Feb-16	13:38:05	62898	6771	-57215	-31	P	-t	-1.2216	0.5826	62S	14E	0		
-2626-Aug-12	10:25:17	62884	6769	-57209	-26	P	-t	1.1567	0.7168	63N	67E	0		
-2626-Sep-10	19:36:22	62882	6768	-57208	12	P	t-	-1.4544	0.1512	61S	85E	0		
-2625-Feb-05	13:56:43	62870	6766	-57203	-21	A	-p	-0.4873	0.9466	49S	110W	61	225	05m06s
-2625-Aug-02	01:06:09	62857	6763	-57197	-16	T	-p	0.4729	1.0199	51N	75E	62	77	01m35s
-2624-Jan-25	19:41:01	62843	6760	-57191	-11	A	n-	0.2607	0.9947	8S	147E	75	19	00m36s
-2624-Jul-21	09:53:27	62829	6758	-57185	-6	A	nn	-0.2800	0.9693	8N	70W	74	115	03m51s
-2623-Jan-14	08:16:40	62816	6755	-57179	-1	T	t-	0.9501	1.0303	48N	50W	18	334	02m24s
-2623-Jul-10	11:55:06	62802	6752	-57173	4	P	t-	-1.0454	0.8819	66S	107W	0		
-2623-Dec-05	13:48:35	62790	6750	-57168	-29	P	-t	-1.0645	0.8823	69S	80E	0		
-2622-May-30	23:27:17	62777	6748	-57162	-24	P	-t	1.0316	0.9237	70N	57W	0		
-2622-Nov-25	01:47:41	62763	6745	-57156	-19	A	-p	-0.4113	0.9791	40S	47E	65	81	01m59s
-2621-May-20	09:35:01	62749	6742	-57150	-14	T	nn	0.2166	1.0425	26N	68W	77	145	03m56s
-2621-Nov-14	06:39:38	62736	6740	-57144	-9	A	n-	0.2880	0.9299	4N	16W	73	274	09m15s
-2620-May-09	01:25:56	62722	6737	-57138	-4	T	p-	-0.5375	1.0776	21S	68E	57	296	06m38s
-2620-Nov-02	05:54:57	62708	6734	-57132	1	An	p-	0.9683	0.9059	63N	29E	14	-	08m18s
-2619-Mar-30	11:03:21	62697	6732	-57127	-32	P	-t	1.2652	0.5091	71N	156W	0		
-2619-Apr-28	18:41:05	62694	6732	-57126	6	P	t-	-1.2799	0.4810	71S	128W	0		
-2619-Sep-22	15:26:15	62683	6729	-57121	-27	P	-t	-1.3074	0.4341	71S	147E	0		
-2618-Mar-19	21:44:47	62669	6727	-57115	-22	A	-p	0.5487	0.9836	23N	109E	57	69	01m47s
-2618-Sep-12	03:14:33	62656	6724	-57109	-17	T	-p	-0.5594	1.0332	20S	25E	56	134	03m06s
-2617-Mar-09	01:07:20	62642	6721	-57103	-12	A	nn	-0.2094	0.9451	25S	72E	78	207	06m40s
-2617-Sep-01	19:04:36	62628	6719	-57097	-7	T	n-	0.1337	1.0564	24N	158E	82	188	04m57s
-2616-Feb-26	01:18:27	62614	6716	-57091	-2	A	t-	-0.9447	0.9370	79S	145E	19	734	04m23s
-2616-Aug-21	10:17:19	62601	6713	-57085	3	T	p-	0.8509	1.0194	75N	40W	31	127	01m13s
-2615-Jan-15	17:36:10	62589	6711	-57080	-30	P	-t	1.1355	0.7448	66N	172W	0		
-2615-Jul-12	06:21:32	62576	6708	-57074	-25	P	-t	-1.1836	0.6501	65S	1E	0		
-2614-Jan-05	07:31:04	62562	6706	-57068	-20	T	-n	0.4014	1.0476	0S	27W	66	173	04m38s
-2614-Jul-01	07:19:13	62548	6703	-57062	-15	A	-p	-0.4541	0.9421	3S	26W	63	239	07m58s
-2614-Dec-25	23:30:50	62535	6701	-57056	-10	T	n-	-0.2814	1.0439	39S	84E	73	153	03m34s

-2613-Jun-20	09:03:43	62521	6698	-57050	-5	A	p-	0.3095	0.9715	39N	65W	72	107	02m51s
-2613-Dec-15	12:53:43	62507	6695	-57044	0	P	p-	-1.0037	0.9788	63S	107E	0		
-2612-May-10	09:11:20	62496	6693	-57039	-33	Pe	-t	-1.5145	0.0355	61S	11E	0		
-2612-Jun-08	17:30:19	62494	6693	-57038	5	P	t-	1.0509	0.9066	62N	43E	0		
-2612-Nov-04	01:20:06	62482	6690	-57033	-28	P	-t	1.2500	0.5342	61N	133E	0		
-2611-Apr-30	01:54:18	62468	6688	-57027	-23	T	-p	-0.7537	1.0761	36S	78E	41	367	05m31s
-2611-Oct-24	00:15:00	62455	6685	-57021	-18	A	-p	0.5833	0.9193	27N	94E	54	368	08m46s
-2610-Apr-19	18:41:24	62441	6682	-57015	-13	T	nn	-0.0136	1.0580	2N	161E	89	191	04m54s
-2610-Oct-13	02:57:49	62427	6680	-57009	-8	A	n-	-0.1235	0.9643	6S	32E	83	130	03m39s
-2609-Apr-09	06:57:57	62414	6677	-57003	-3	A	p-	0.7851	0.9959	42N	54W	38	23	00m20s
-2609-Oct-02	13:05:00	62400	6674	-56997	2	T	p-	-0.8038	1.0140	41S	147W	36	79	01m05s
-2608-Feb-27	20:30:03	62389	6672	-56992	-31	P	-t	-1.2800	0.4840	62S	100W	0		
-2608-Aug-22	18:36:44	62375	6670	-56986	-26	P	-t	1.1897	0.6532	62N	68W	0		
-2608-Sep-21	04:11:58	62373	6669	-56985	12	P	t-	-1.4399	0.1795	61S	55W	0		
-2607-Feb-15	21:07:27	62361	6667	-56980	-21	A	-p	-0.5353	0.9516	49S	144E	57	209	04m28s
-2607-Aug-12	08:53:18	62348	6664	-56974	-16	H	-p	0.5153	1.0129	51N	39W	59	52	01m01s
-2606-Feb-05	03:28:17	62334	6662	-56968	-11	H	n-	0.2241	1.0015	9S	29E	77	5	00m09s
-2606-Aug-01	17:04:57	62320	6659	-56962	-6	A	nn	-0.2276	0.9636	10N	180W	77	135	04m30s
-2605-Jan-25	16:32:19	62307	6656	-56956	-1	T	t-	0.9222	1.0368	43N	180W	22	321	02m58s
-2605-Jul-21	18:39:52	62293	6654	-56950	4	As	t-	-0.9820	0.9268	55S	145E	10	-	07m13s
-2605-Dec-16	22:30:34	62282	6651	-56945	-29	P	-t	-1.0712	0.8698	68S	64W	0		
-2604-Jun-10	06:11:21	62268	6649	-56939	-24	P	-t	1.1058	0.7925	69N	172W	0		
-2604-Dec-05	10:15:29	62254	6646	-56933	-19	A	-p	-0.4138	0.9774	43S	81W	65	89	02m08s
-2603-May-30	16:45:05	62241	6643	-56927	-14	T	-n	0.2910	1.0446	34N	179W	73	156	03m57s
-2603-Nov-24	14:46:16	62227	6641	-56921	-9	A	n-	0.2866	0.9287	0N	140W	73	279	09m40s
-2602-May-20	08:48:28	62213	6638	-56915	-4	T	p-	-0.4628	1.0790	13S	48W	62	287	07m02s
-2602-Nov-13	13:56:29	62200	6636	-56909	1	A	p-	0.9663	0.9066	60N	101W	14	1431	08m39s
-2601-Apr-10	18:19:17	62188	6633	-56904	-32	P	-t	1.3384	0.3718	72N	79E	0		
-2601-May-10	01:58:21	62186	6633	-56903	6	P	t-	-1.2093	0.6167	71S	107E	0		
-2601-Oct-03	23:45:54	62175	6631	-56898	-27	P	-t	-1.3108	0.4280	71S	6E	0		
-2600-Mar-30	04:37:58	62161	6628	-56892	-22	A	-p	0.6230	0.9816	32N	0W	51	83	01m53s
-2600-Sep-22	11:47:12	62147	6625	-56886	-17	T	-p	-0.5701	1.0326	25S	108W	55	133	02m56s

26TH CENTURY BCE

In the 26th century BCE the total number of solar eclipses was 239 solar eclipses: 79 partial solar eclipses, 89 annular solar eclipses (88 central annular solar eclipses with two limits, 0 central annular solar eclipses with one limit, 1 non-central annular solar eclipses with one limit), 66 total solar eclipses (65 central total solar eclipses with two limits, 0 central total solar eclipses with one limit, 1 non-central total solar eclipses with one limit), 5 hybrid solar eclipses.

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL	
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°	°	ALT	WIDTH	DUR.	
GREATEST		S										°	km		
ECLIPSE															
-2599-Mar-19	07:43:14		62134	6623	-56880	-12	A	nn	-0.1365	0.9467	17S	31W	82	198	06m40s
-2599-Sep-12	03:33:51		62120	6620	-56874	-7	T	n-	0.1152	1.0528	19N	28E	83	176	04m42s
-2598-Mar-08	08:07:44		62106	6617	-56868	-2	A	t-	-0.8803	0.9438	70S	2E	28	440	04m20s
-2598-Sep-01	18:25:48		62093	6615	-56862	3	T	p-	0.8270	1.0140	69N	167W	34	86	00m56s
-2597-Jan-27	01:38:01		62081	6613	-56857	-30	P	-t	1.1597	0.7020	67N	54E	0		
-2597-Jul-23	13:17:49		62068	6610	-56851	-25	P	-t	-1.2461	0.5416	66S	115W	0		
-2596-Jan-16	15:56:51		62054	6607	-56845	-20	T	-n	0.4216	1.0518	1N	156W	65	189	05m03s
-2596-Jul-11	13:55:15		62040	6605	-56839	-15	A	-p	-0.5260	0.9393	8S	128W	58	264	08m31s
-2595-Jan-05	08:03:58		62027	6602	-56833	-10	T	n-	-0.2673	1.0452	39S	43W	74	156	03m44s
-2595-Jun-30	15:51:55		62013	6599	-56827	-5	A	nn	0.2357	0.9726	37N	166W	76	101	02m52s
-2595-Dec-25	21:17:27		61999	6597	-56821	0	A-	p-	-0.9973	0.9898	64S	31W	0		
-2594-Jun-20	00:42:13		61986	6594	-56815	5	T	t-	0.9772	1.0164	71N	55W	12	283	00m52s
-2594-Nov-15	09:24:03		61974	6592	-56810	-28	P	-t	1.2532	0.5288	61N	2E	0		
-2593-May-11	09:17:08		61961	6589	-56804	-23	T	-p	-0.8285	1.0744	39S	34W	34	422	05m23s
-2593-Nov-04	08:18:18		61947	6587	-56798	-18	A	-p	0.5854	0.9200	23N	30W	54	365	09m01s

-2592-Apr-30	01:55:45	61933	6584	-56792	-13	T	nn	-0.0898	1.0556	2N	51E	85	184	04m47s
-2592-Oct-23	11:20:25	61920	6581	-56786	-8	A	n-	-0.1211	0.9661	10S	96W	83	123	03m25s
-2591-Apr-19	13:48:46	61906	6579	-56780	-3	A	p-	0.7092	0.9949	41N	156W	45	25	00m26s
-2591-Oct-12	21:45:01	61893	6576	-56774	2	T	p-	-0.7975	1.0149	44S	78E	37	83	01m06s
-2590-Mar-10	03:12:18	61881	6574	-56769	-31	P	-t	-1.3460	0.3719	61S	148E	0		
-2590-Apr-08	18:26:19	61879	6573	-56768	7	Pb	t-	1.5210	0.0688	61N	76E	0		
-2590-Sep-03	02:56:28	61868	6571	-56763	-26	P	-t	1.2160	0.6028	62N	156E	0		
-2590-Oct-02	12:53:43	61865	6571	-56762	12	P	t-	-1.4303	0.1982	61S	163E	0		
-2589-Feb-27	04:10:17	61854	6569	-56757	-21	A	-p	-0.5906	0.9564	48S	41E	54	195	03m53s
-2589-Aug-23	16:48:45	61840	6566	-56751	-16	H	-p	0.5502	1.0059	49N	156W	56	25	00m28s
-2588-Feb-16	11:06:31	61827	6563	-56745	-11	H	n-	0.1791	1.0084	10S	88W	80	29	00m52s
-2588-Aug-12	00:24:21	61813	6561	-56739	-6	A	nn	-0.1824	0.9577	11N	69E	80	156	05m07s
-2587-Feb-05	00:38:45	61800	6558	-56733	-1	T	p-	0.8863	1.0436	39N	54E	27	312	03m33s
-2587-Aug-01	01:33:46	61786	6555	-56727	4	A	t-	-0.9258	0.9264	44S	38E	22	733	08m05s
-2587-Dec-27	07:06:04	61775	6553	-56722	-29	P	-t	-1.0831	0.8478	67S	154E	0		
-2586-Jun-21	13:02:35	61761	6551	-56716	-24	P	-t	1.1751	0.6695	68N	71E	0		
-2586-Dec-16	18:38:53	61747	6548	-56710	-19	A	-p	-0.4194	0.9761	46S	154E	65	94	02m14s
-2585-Jun-10	23:58:14	61734	6545	-56704	-14	T	-n	0.3638	1.0461	41N	71E	68	165	03m53s
-2585-Dec-05	22:50:46	61720	6543	-56698	-9	A	n-	0.2840	0.9282	3S	96E	74	281	09m58s
-2584-May-30	16:11:40	61707	6540	-56692	-4	T	p-	-0.3883	1.0794	5S	164W	67	278	07m17s
-2584-Nov-23	21:57:47	61693	6537	-56686	1	A	p-	0.9640	0.9080	57N	129E	15	1360	08m54s
-2583-Apr-21	01:29:36	61682	6535	-56681	-32	P	-t	1.4150	0.2284	71N	45W	0		
-2583-May-20	09:14:34	61679	6535	-56680	6	P	t-	-1.1383	0.7525	70S	17W	0		
-2583-Oct-14	08:12:19	61668	6533	-56675	-27	P	-t	-1.3097	0.4298	71S	137W	0		
-2582-Apr-10	11:25:25	61654	6530	-56669	-22	A	-p	0.7007	0.9789	41N	110W	45	104	02m00s
-2582-Oct-03	20:25:18	61641	6527	-56663	-17	T	-p	-0.5768	1.0323	29S	119E	55	133	02m48s
-2581-Mar-30	14:13:59	61627	6525	-56657	-12	Am	nn	-0.0597	0.9481	9S	133W	87	191	06m36s
-2581-Sep-23	12:09:17	61614	6522	-56651	-7	T	n-	0.1021	1.0495	14N	103W	84	165	04m27s
-2580-Mar-18	14:49:58	61600	6519	-56645	-2	A	p-	-0.8092	0.9500	60S	115W	36	311	04m15s
-2580-Sep-12	02:41:38	61586	6517	-56639	3	H	p-	0.8099	1.0085	63N	65E	36	50	00m36s
-2579-Feb-06	09:31:06	61575	6515	-56634	-30	P	-t	1.1919	0.6440	68N	77W	0		
-2579-Mar-07	20:24:35	61573	6514	-56633	8	Pb	t-	-1.5073	0.0722	70S	94W	0		

-2579-Aug-02	20:22:45	61562	6512	-56628	-25	P	-t	-1.3008	0.4479	67S	126E	0		
-2578-Jan-27	00:13:17	61548	6509	-56622	-20	T	-n	0.4499	1.0560	4N	76E	63	207	05m25s
-2578-Jul-22	20:42:04	61535	6507	-56616	-15	A	-p	-0.5891	0.9363	12S	127E	54	293	08m55s
-2577-Jan-16	16:28:33	61521	6504	-56610	-10	T	n-	-0.2466	1.0466	38S	169W	76	160	03m55s
-2577-Jul-11	22:48:31	61507	6502	-56604	-5	A	nn	0.1678	0.9732	34N	91E	80	98	02m55s
-2576-Jan-06	05:33:15	61494	6499	-56598	0	A	p-	-0.9854	0.9817	73S	158W	9	430	01m00s
-2576-Jun-30	08:00:24	61480	6496	-56592	5	T	t-	0.9078	1.0212	79N	128W	24	175	01m13s
-2576-Nov-25	17:26:22	61469	6494	-56587	-28	P	-t	1.2575	0.5217	62N	130W	0		
-2575-May-21	16:39:08	61455	6491	-56581	-23	T	-t	-0.9038	1.0712	44S	144W	25	532	05m03s
-2575-Nov-14	16:24:05	61442	6489	-56575	-18	A	-p	0.5858	0.9215	20N	156W	54	358	09m12s
-2574-May-11	09:07:31	61428	6486	-56569	-13	T	-n	-0.1676	1.0525	2N	58W	80	176	04m38s
-2574-Nov-03	19:47:03	61415	6484	-56563	-8	A	n-	-0.1212	0.9685	15S	134E	83	114	03m10s
-2573-Apr-30	20:35:19	61401	6481	-56557	-3	A	p-	0.6305	0.9933	40N	103E	51	30	00m34s
-2573-Oct-24	06:30:07	61387	6478	-56551	2	T	p-	-0.7950	1.0162	48S	58W	37	90	01m09s
-2572-Mar-20	09:46:07	61376	6476	-56546	-31	P	-t	-1.4182	0.2487	61S	39E	0		
-2572-Apr-19	00:48:29	61374	6476	-56545	7	P	t-	1.4399	0.2087	61N	30W	0		
-2572-Sep-13	11:23:41	61362	6474	-56540	-26	P	-t	1.2362	0.5645	61N	18E	0		
-2572-Oct-12	21:41:28	61360	6473	-56539	12	P	t-	-1.4258	0.2072	61S	21E	0		
-2571-Mar-09	11:06:25	61349	6471	-56534	-21	A	-p	-0.6520	0.9611	48S	61W	49	183	03m22s
-2571-Sep-03	00:51:11	61335	6468	-56528	-16	A	-p	0.5784	0.9993	47N	84E	54	3	00m03s
-2570-Feb-26	18:38:49	61322	6466	-56522	-11	H	nn	0.1280	1.0151	10S	158E	83	52	01m29s
-2570-Aug-23	07:51:49	61308	6463	-56516	-6	A	nn	-0.1446	0.9521	11N	45W	82	177	05m40s
-2569-Feb-16	08:38:56	61295	6461	-56510	-1	T	p-	0.8447	1.0501	35N	70W	32	306	04m03s
-2569-Aug-12	08:36:07	61281	6458	-56504	4	A	p-	-0.8760	0.9247	38S	72W	29	580	08m36s
-2568-Jan-07	15:34:25	61270	6456	-56499	-29	P	-t	-1.1007	0.8153	66S	14E	0		
-2568-Feb-06	01:12:33	61268	6455	-56498	9	Pb	t-	1.5283	0.0081	63N	23E	0		
-2568-Jul-01	20:01:44	61256	6453	-56493	-24	P	-t	1.2389	0.5559	67N	47W	0		
-2568-Dec-27	02:53:09	61243	6450	-56487	-19	A	-p	-0.4320	0.9752	49S	32E	64	98	02m17s
-2567-Jun-21	07:18:31	61229	6448	-56481	-14	T	-p	0.4315	1.0467	48N	40W	64	173	03m44s
-2567-Dec-16	06:48:14	61216	6445	-56475	-9	A	nn	0.2757	0.9284	6S	26W	74	279	10m06s
-2566-Jun-10	23:39:05	61202	6443	-56469	-4	T	n-	-0.3171	1.0789	1N	80E	72	269	07m21s
-2566-Dec-05	05:55:27	61189	6440	-56463	1	A	p-	0.9582	0.9104	54N	0E	16	1225	09m05s
-2565-May-02	08:36:13	61177	6438	-56458	-32	Pe	-t	1.4938	0.0821	71N	167W	0		

-2565-May-31	16:31:30	61175	6437	-56457	6	P	t-	-1.0681	0.8858	69S	141W	0		
-2565-Oct-25	16:44:10	61164	6435	-56452	-27	P	-t	-1.3051	0.4378	71S	79E	0		
-2564-Apr-20	18:04:22	61150	6433	-56446	-22	A	-p	0.7842	0.9754	52N	141E	38	140	02m08s
-2564-Oct-14	05:10:47	61137	6430	-56440	-17	T	-p	-0.5780	1.0324	34S	16W	54	133	02m43s
-2563-Apr-09	20:36:30	61123	6427	-56434	-12	A	nn	0.0237	0.9490	0N	127E	89	187	06m31s
-2563-Oct-03	20:51:42	61110	6425	-56428	-7	T	n-	0.0949	1.0464	9N	124E	84	155	04m12s
-2562-Mar-29	21:26:48	61096	6422	-56422	-2	A	p-	-0.7327	0.9557	50S	136E	43	235	04m07s
-2562-Sep-23	11:04:49	61083	6420	-56416	3	H	p-	0.7995	1.0033	58N	65W	37	19	00m14s
-2561-Feb-17	17:18:15	61071	6417	-56411	-30	P	-t	1.2297	0.5750	69N	152E	0		
-2561-Mar-19	03:36:30	61069	6417	-56410	8	P	t-	-1.4418	0.1883	71S	143E	0		
-2561-Aug-14	03:34:30	61058	6415	-56405	-25	P	-t	-1.3489	0.3661	68S	4E	0		
-2560-Feb-07	08:23:27	61044	6412	-56399	-20	T	-p	0.4839	1.0600	8N	50W	61	225	05m43s
-2560-Aug-02	03:37:16	61031	6410	-56393	-15	A	-p	-0.6452	0.9333	17S	19E	50	326	09m09s
-2559-Jan-27	00:44:35	61017	6407	-56387	-10	T	n-	-0.2192	1.0480	36S	68E	77	164	04m08s
-2559-Jul-22	05:55:38	61004	6404	-56381	-5	A	nn	0.1078	0.9734	30N	16W	84	96	02m58s
-2558-Jan-16	13:40:32	60990	6402	-56375	0	A	p-	-0.9677	0.9828	80S	68E	14	255	00m58s
-2558-Jul-11	15:27:19	60977	6399	-56369	5	T	t-	0.8448	1.0240	80N	163E	32	154	01m28s
-2558-Dec-07	01:24:09	60965	6397	-56364	-28	P	-t	1.2649	0.5094	62N	99E	0		
-2557-Jun-02	00:03:57	60952	6394	-56358	-23	T	-t	-0.9766	1.0655	54S	109E	12	1027	04m23s
-2557-Nov-26	00:28:37	60938	6392	-56352	-18	A	-p	0.5878	0.9237	17N	80E	54	349	09m17s
-2556-May-21	16:17:38	60925	6389	-56346	-13	T	-n	-0.2460	1.0485	1N	167W	76	166	04m25s
-2556-Nov-14	04:15:13	60911	6387	-56340	-8	A	n-	-0.1218	0.9716	19S	5E	83	103	02m51s
-2555-May-11	03:18:23	60898	6384	-56334	-3	A	p-	0.5499	0.9908	40N	3E	56	38	00m48s
-2555-Nov-03	15:17:14	60884	6381	-56328	2	T	p-	-0.7937	1.0180	52S	166E	37	100	01m14s
-2554-Mar-31	16:13:04	60873	6379	-56323	-31	Pe	-t	-1.4953	0.1166	61S	69W	0		
-2554-Apr-30	07:07:29	60871	6379	-56322	7	P	t-	1.3561	0.3530	61N	136W	0		
-2554-Sep-24	19:58:24	60859	6377	-56317	-26	P	-t	1.2500	0.5385	61N	121W	0		
-2554-Oct-24	06:33:11	60857	6376	-56316	12	P	t-	-1.4250	0.2092	61S	123W	0		
-2553-Mar-20	17:55:49	60846	6374	-56311	-21	A	-p	-0.7198	0.9654	48S	162W	44	176	02m55s
-2553-Sep-14	09:00:58	60832	6371	-56305	-16	A	-p	0.5998	0.9929	44N	39W	53	31	00m34s
-2552-Mar-09	02:03:41	60819	6369	-56299	-11	T	nn	0.0698	1.0218	9S	45E	86	74	02m03s
-2552-Sep-02	15:27:55	60805	6366	-56293	-6	A	nn	-0.1145	0.9467	10N	160W	83	197	06m11s
-2551-Feb-26	16:29:46	60792	6364	-56287	-1	T	p-	0.7947	1.0564	32N	169E	37	301	04m31s

-2551-Aug-22	15:49:27	60778	6361	-56281	4	A	p-	-0.8348	0.9226	34S	176E	33	519	08m52s
-2550-Jan-17	23:54:42	60767	6359	-56276	-29	P	-t	-1.1249	0.7706	65S	124W	0		
-2550-Feb-16	09:14:51	60765	6358	-56275	9	P	t-	1.4915	0.0777	62N	109W	0		
-2550-Jul-13	03:09:22	60754	6356	-56270	-24	P	-t	1.2967	0.4528	66N	166W	0		
-2550-Aug-11	16:43:31	60751	6356	-56269	14	Pb	t-	-1.5144	0.0794	63S	143E	0		
-2549-Jan-07	11:00:32	60740	6354	-56264	-19	A	-p	-0.4494	0.9746	51S	87W	63	102	02m18s
-2549-Jul-02	14:44:38	60727	6351	-56258	-14	T	-p	0.4952	1.0468	53N	151W	60	180	03m33s
-2549-Dec-27	14:39:44	60713	6348	-56252	-9	A	nn	0.2631	0.9292	8S	146W	75	275	10m02s
-2548-Jun-21	07:09:17	60700	6346	-56246	-4	T	n-	-0.2483	1.0776	8N	36W	76	259	07m14s
-2548-Dec-15	13:49:52	60686	6343	-56240	1	A	p-	0.9492	0.9135	50N	127W	18	1069	09m08s
-2547-Jun-10	23:50:27	60673	6341	-56234	6	T-	t-	-1.0003	1.0134	69S	95E	0		
-2547-Nov-05	01:18:26	60662	6339	-56229	-27	P	-t	-1.2994	0.4478	71S	66W	0		
-2546-May-02	00:40:59	60648	6336	-56223	-22	A	-t	0.8683	0.9710	63N	28E	29	210	02m16s
-2546-Oct-25	13:59:37	60635	6333	-56217	-17	T	-p	-0.5770	1.0330	38S	151W	55	136	02m40s
-2545-Apr-21	02:55:35	60621	6331	-56211	-12	A	nn	0.1096	0.9497	9N	27E	84	186	06m22s
-2545-Oct-15	05:38:18	60608	6328	-56205	-7	T	n-	0.0914	1.0437	5N	11W	85	146	04m00s
-2544-Apr-09	03:59:55	60594	6326	-56199	-2	A	p-	-0.6519	0.9610	40S	30E	49	184	03m57s
-2544-Oct-03	19:33:29	60581	6323	-56193	3	A	p-	0.7945	0.9983	53N	163E	37	10	00m08s
-2543-Feb-28	00:56:42	60569	6321	-56188	-30	P	-t	1.2751	0.4908	70N	23E	0		
-2543-Mar-29	10:42:54	60567	6320	-56187	8	P	t-	-1.3706	0.3165	71S	21E	0		
-2543-Aug-24	10:56:20	60556	6318	-56182	-25	P	-t	-1.3879	0.3008	69S	120W	0		
-2542-Feb-17	16:24:42	60542	6316	-56176	-20	T	-p	0.5253	1.0637	13N	174W	58	245	05m54s
-2542-Aug-13	10:43:17	60529	6313	-56170	-15	A	-p	-0.6924	0.9304	23S	93W	46	361	09m13s
-2541-Feb-07	08:51:21	60515	6310	-56164	-10	T	n-	-0.1846	1.0494	32S	55W	79	167	04m21s
-2541-Aug-02	13:13:21	60502	6308	-56158	-5	A	nn	0.0559	0.9735	26N	126W	87	95	03m03s
-2540-Jan-27	21:36:26	60488	6305	-56152	0	A	p-	-0.9414	0.9843	86S	93W	19	170	00m56s
-2540-Jul-21	23:02:34	60475	6303	-56146	5	T	p-	0.7876	1.0256	76N	77E	38	142	01m38s
-2540-Dec-17	09:17:02	60464	6301	-56141	-28	P	-t	1.2758	0.4911	63N	30W	0		
-2539-Jun-12	07:30:51	60450	6298	-56135	-23	P	-t	-1.0476	0.9323	63S	1E	0		
-2539-Jul-11	14:35:14	60448	6298	-56134	15	P	t-	1.4662	0.1223	65N	48E	0		
-2539-Dec-06	08:30:58	60437	6295	-56129	-18	A	-p	0.5920	0.9266	15N	45W	54	337	09m16s
-2538-Jun-01	23:28:12	60423	6293	-56123	-13	T	-p	-0.3232	1.0437	0N	84E	71	153	04m09s
-2538-Nov-25	12:44:25	60410	6290	-56117	-8	A	n-	-0.1224	0.9752	23S	124W	83	89	02m29s

-2537-May-22	09:58:38	60396	6288	-56111	-3	A	p-	0.4677	0.9878	39N	95W	62	48	01m06s
-2537-Nov-15	00:06:45	60383	6285	-56105	2	T	p-	-0.7939	1.0202	56S	29E	37	112	01m21s
-2536-May-10	13:23:36	60370	6283	-56099	7	P	t-	1.2698	0.5013	61N	119E	0		
-2536-Oct-05	04:38:40	60358	6280	-56094	-26	P	-t	1.2595	0.5206	61N	98E	0		
-2536-Nov-03	15:27:08	60356	6280	-56093	12	P	t-	-1.4260	0.2075	61S	93E	0		
-2535-Mar-31	00:40:42	60345	6278	-56088	-21	A	-p	-0.7921	0.9692	48S	99E	37	177	02m33s
-2535-Sep-24	17:17:08	60332	6275	-56082	-16	A	-p	0.6153	0.9870	40N	165W	52	57	01m04s
-2534-Mar-20	09:24:45	60318	6273	-56076	-11	T	nn	0.0070	1.0280	9S	66W	90	95	02m33s
-2534-Sep-13	23:10:18	60305	6270	-56070	-6	A	nn	-0.0900	0.9417	7N	82E	85	217	06m40s
-2533-Mar-10	00:15:23	60291	6267	-56064	-1	T	p-	0.7398	1.0621	30N	50E	42	297	04m53s
-2533-Sep-02	23:11:52	60278	6265	-56058	4	A	p-	-0.8005	0.9205	33S	61E	37	487	08m58s
-2532-Jan-29	08:04:46	60266	6263	-56053	-29	P	-t	-1.1570	0.7111	64S	102E	0		
-2532-Feb-27	17:07:30	60264	6262	-56052	9	P	t-	1.4472	0.1618	62N	122E	0		
-2532-Jul-23	10:27:02	60253	6260	-56047	-24	P	-t	1.3473	0.3625	65N	72E	0		
-2532-Aug-22	00:12:21	60251	6260	-56046	14	P	t-	-1.4728	0.1515	62S	20E	0		
-2531-Jan-17	18:56:38	60240	6258	-56041	-19	A	-p	-0.4756	0.9742	52S	157E	61	105	02m17s
-2531-Jul-12	22:19:50	60226	6255	-56035	-14	T	-p	0.5520	1.0462	58N	99E	56	185	03m21s
-2530-Jan-06	22:20:44	60213	6252	-56029	-9	A	nn	0.2420	0.9304	10S	97E	76	269	09m46s
-2530-Jul-02	14:46:24	60199	6250	-56023	-4	T	n-	-0.1852	1.0754	13N	153W	79	249	06m59s
-2530-Dec-26	21:38:06	60186	6247	-56017	1	A	p-	0.9346	0.9174	46N	108E	20	895	09m04s
-2529-Jun-22	07:11:23	60172	6245	-56011	6	T	t-	-0.9345	1.0405	47S	34W	20	386	03m15s
-2529-Nov-16	09:55:09	60161	6243	-56006	-27	P	-t	-1.2928	0.4596	70S	150E	0		
-2528-May-12	07:12:41	60148	6240	-56000	-22	A	-t	0.9556	0.9649	74N	108W	17	443	02m23s
-2528-Nov-04	22:51:47	60134	6237	-55994	-17	T	-p	-0.5737	1.0342	43S	73E	55	140	02m41s
-2527-May-01	09:10:15	60121	6235	-55988	-12	A	nn	0.1991	0.9498	18N	71W	78	188	06m12s
-2527-Oct-25	14:29:42	60108	6232	-55982	-7	T	n-	0.0920	1.0414	0N	146W	85	139	03m50s
-2526-Apr-20	10:30:40	60094	6230	-55976	-2	A	p-	-0.5683	0.9658	30S	75W	55	148	03m43s
-2526-Oct-15	04:06:28	60081	6227	-55970	3	A	p-	0.7937	0.9937	49N	30E	37	36	00m31s
-2525-Mar-11	08:30:17	60070	6225	-55965	-30	P	-t	1.3252	0.3967	70N	106W	0		
-2525-Apr-09	17:46:54	60067	6225	-55964	8	P	t-	-1.2960	0.4524	72S	101W	0		
-2525-Sep-04	18:25:50	60056	6222	-55959	-25	P	-t	-1.4199	0.2478	70S	113E	0		
-2525-Oct-04	11:33:02	60054	6222	-55958	13	P	t-	1.5489	0.0241	71N	1W	0		
-2524-Feb-29	00:18:16	60043	6220	-55953	-20	T	-p	0.5736	1.0670	19N	63E	55	266	05m58s

-2524-Aug-23	17:59:03	60029	6217	-55947	-15	A	-p	-0.7318	0.9277	28S	153E	43	397	09m07s
-2523-Feb-17	16:49:15	60016	6215	-55941	-10	T	nn	-0.1430	1.0505	27S	176W	82	169	04m33s
-2523-Aug-12	20:41:37	60003	6212	-55935	-5	A	nn	0.0116	0.9734	22N	120E	89	95	03m05s
-2522-Feb-07	05:22:46	59989	6210	-55929	0	A	p-	-0.9082	0.9855	83S	53E	24	125	00m55s
-2522-Aug-02	06:47:53	59976	6207	-55923	5	T	p-	0.7381	1.0266	71N	28W	42	135	01m47s
-2522-Dec-28	17:03:00	59964	6205	-55918	-28	P	-t	1.2920	0.4642	64N	158W	0		
-2521-Jun-23	15:01:21	59951	6202	-55912	-23	P	-t	-1.1153	0.8000	64S	123W	0		
-2521-Jul-22	22:23:29	59949	6202	-55911	15	P	t-	1.4133	0.2247	66N	81W	0		
-2521-Dec-17	16:29:06	59938	6200	-55906	-18	A	-p	0.6002	0.9300	14N	168W	53	324	09m04s
-2520-Jun-12	06:40:22	59924	6197	-55900	-13	T	-p	-0.3978	1.0382	2S	26W	67	139	03m46s
-2520-Dec-05	21:10:14	59911	6195	-55894	-8	A	n-	-0.1195	0.9796	26S	108E	83	73	02m03s
-2519-Jun-01	16:39:28	59897	6192	-55888	-3	A	p-	0.3870	0.9840	39N	166E	67	61	01m29s
-2519-Nov-25	08:54:57	59884	6189	-55882	2	T	p-	-0.7931	1.0230	61S	106W	37	128	01m29s
-2518-May-21	19:39:44	59871	6187	-55876	7	P	t-	1.1833	0.6496	61N	14E	0		
-2518-Oct-16	13:23:11	59859	6185	-55871	-26	P	-t	1.2653	0.5098	60N	44W	0		
-2518-Nov-15	00:21:11	59857	6184	-55870	12	P	t-	-1.4276	0.2045	61S	52W	0		
-2517-Apr-11	07:22:01	59846	6182	-55865	-21	A	-p	-0.8679	0.9722	50S	2E	29	195	02m14s
-2517-Oct-06	01:39:27	59833	6180	-55859	-16	A	-p	0.6249	0.9817	36N	67E	51	82	01m34s
-2516-Mar-30	16:38:54	59819	6177	-55853	-11	T	nn	-0.0625	1.0338	8S	176W	86	114	03m01s
-2516-Sep-24	07:01:11	59806	6175	-55847	-6	A	nn	-0.0733	0.9371	4N	38W	86	235	07m07s
-2515-Mar-20	07:53:24	59793	6172	-55841	-1	T	p-	0.6783	1.0674	29N	67W	47	293	05m12s
-2515-Sep-13	06:44:06	59779	6169	-55835	4	A	p-	-0.7741	0.9186	33S	55W	39	472	08m56s
-2514-Feb-08	16:05:54	59768	6167	-55830	-29	P	-t	-1.1958	0.6389	63S	30W	0		
-2514-Mar-10	00:52:41	59766	6167	-55829	9	P	t-	1.3974	0.2568	61N	6W	0		
-2514-Aug-03	17:55:17	59755	6165	-55824	-24	P	-t	1.3901	0.2860	64N	52W	0		
-2514-Sep-02	07:52:15	59752	6164	-55823	14	P	t-	-1.4392	0.2096	62S	106W	0		
-2513-Jan-29	02:44:17	59741	6162	-55818	-19	A	-p	-0.5078	0.9740	52S	43E	59	108	02m16s
-2513-Jul-24	06:01:43	59728	6160	-55812	-14	T	-p	0.6038	1.0452	60N	11W	53	189	03m09s
-2512-Jan-18	05:54:20	59714	6157	-55806	-9	A	nn	0.2154	0.9321	12S	19W	78	260	09m20s
-2512-Jul-12	22:28:56	59701	6154	-55800	-4	T	n-	-0.1267	1.0726	17N	89E	83	238	06m38s
-2511-Jan-06	05:19:22	59688	6152	-55794	1	A	p-	0.9137	0.9219	42N	14W	24	732	08m50s
-2511-Jul-02	14:37:30	59674	6149	-55788	6	T	p-	-0.8736	1.0376	38S	153W	29	261	03m18s
-2511-Nov-26	18:31:01	59663	6147	-55783	-27	P	-t	-1.2878	0.4684	70S	6E	0		

-2510-May-23	13:44:40	59650	6145	-55777	-22	P	-t	1.0411	0.9015	70N	83E	0	
-2510-Nov-16	07:43:39	59636	6142	-55771	-17	T	-p	-0.5711	1.0358	47S	61W	55	147 02m44s
-2509-May-12	15:25:03	59623	6140	-55765	-12	A	np	0.2884	0.9495	27N	170W	73	193 05m59s
-2509-Nov-05	23:22:02	59610	6137	-55759	-7	T	n-	0.0939	1.0397	4S	78E	85	133 03m43s
-2508-Apr-30	16:59:26	59596	6134	-55753	-2	A	p-	-0.4820	0.9701	20S	178W	61	122 03m26s
-2508-Oct-25	12:42:26	59583	6132	-55747	3	A	p-	0.7964	0.9897	45N	103W	37	60 00m53s
-2507-Mar-21	15:57:03	59572	6130	-55742	-30	P	-t	1.3814	0.2903	71N	127E	0	
-2507-Apr-20	00:48:23	59570	6129	-55741	8	P	t-	-1.2182	0.5957	72S	137E	0	
-2507-Sep-15	02:03:49	59558	6127	-55736	-25	P	-t	-1.4443	0.2081	71S	17W	0	
-2507-Oct-14	19:40:40	59556	6127	-55735	13	P	t-	1.5473	0.0289	71N	139W	0	
-2506-Mar-11	08:04:02	59545	6125	-55730	-20	T	-p	0.6284	1.0697	26N	59W	51	290 05m54s
-2506-Sep-04	01:26:06	59532	6122	-55724	-15	A	-p	-0.7622	0.9253	33S	36E	40	431 08m53s
-2505-Mar-01	00:37:21	59518	6120	-55718	-10	Tm	nn	-0.0939	1.0513	21S	65E	84	171 04m43s
-2505-Aug-24	04:20:42	59505	6117	-55712	-5	A	nn	-0.0245	0.9733	17N	3E	89	96 03m07s
-2504-Feb-18	12:57:41	59492	6114	-55706	0	A	p-	-0.8666	0.9867	76S	84W	30	95 00m54s
-2504-Aug-12	14:42:53	59478	6112	-55700	5	T	p-	0.6962	1.0270	65N	142W	46	128 01m53s
-2503-Jan-08	00:39:57	59467	6110	-55695	-28	P	-t	1.3147	0.4261	65N	75E	0	
-2503-Jul-03	22:37:04	59454	6107	-55689	-23	P	-t	-1.1781	0.6777	64S	111E	0	
-2503-Aug-02	06:20:23	59452	6107	-55688	15	P	t-	1.3677	0.3130	67N	147E	0	
-2503-Dec-28	00:22:37	59440	6105	-55683	-18	A	-p	0.6122	0.9340	14N	70E	52	309 08m42s
-2502-Jun-23	13:54:41	59427	6102	-55677	-13	T	-p	-0.4697	1.0321	5S	137W	62	122 03m17s
-2502-Dec-17	05:33:52	59414	6100	-55671	-8	A	n-	-0.1140	0.9845	28S	18W	83	55 01m34s
-2501-Jun-12	23:20:45	59400	6097	-55665	-3	A	nn	0.3077	0.9798	37N	67E	72	75 01m59s
-2501-Dec-06	17:41:30	59387	6094	-55659	2	T	p-	-0.7904	1.0264	65S	121E	37	146 01m40s
-2500-Jun-01	01:55:57	59374	6092	-55653	7	P	t-	1.0965	0.7980	62N	91W	0	
-2500-Oct-26	22:11:06	59363	6090	-55648	-26	P	-t	1.2682	0.5044	61N	173E	0	
-2500-Nov-25	09:14:26	59360	6089	-55647	12	P	t-	-1.4289	0.2020	62S	164E	0	

25TH CENTURY BCE

In the 25th century BCE the total number of solar eclipses was 256 solar eclipses: 95 partial solar eclipses, 88 annular solar eclipses (87 central annular solar eclipses with two limits, 0 central annular solar eclipses with one limit, 1 non-central annular solar eclipses with one limit), 66 total solar eclipses (65 central total solar eclipses with two limits, 0 central total solar eclipses with one limit, 1 non-central total solar eclipses with one limit), 7 hybrid solar eclipses.

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°	°	ALT	WIDTH	DUR.
	GREATEST		S									°	km	
	ECLIPSE													
-2499-Apr-21	14:02:00	59349	6087	-55642	-21	A	-t	-0.9456	0.9738	54S	92W	19	284	02m00s
-2499-Oct-16	10:04:40	59336	6085	-55636	-16	A	-p	0.6313	0.9770	32N	63W	51	104	02m03s
-2498-Apr-10	23:51:50	59323	6082	-55630	-11	Tm	nn	-0.1339	1.0390	7S	75E	82	132	03m26s
-2498-Oct-05	14:57:17	59309	6080	-55624	-6	A	nn	-0.0616	0.9331	0N	159W	86	250	07m32s
-2497-Mar-31	15:26:42	59296	6077	-55618	-1	T	p-	0.6124	1.0720	28N	178E	52	291	05m28s
-2497-Sep-24	14:24:34	59283	6075	-55612	4	A	p-	-0.7541	0.9170	35S	174W	41	464	08m48s
-2496-Feb-19	23:56:50	59271	6072	-55607	-29	P	-t	-1.2425	0.5520	62S	159W	0		
-2496-Mar-20	08:29:39	59269	6072	-55606	9	P	t-	1.3415	0.3639	61N	131W	0		
-2496-Aug-14	01:34:33	59258	6070	-55601	-24	P	-t	1.4252	0.2235	63N	178W	0		
-2496-Sep-12	15:42:37	59256	6069	-55600	14	P	t-	-1.4128	0.2551	61S	125E	0		
-2495-Feb-08	10:18:48	59245	6067	-55595	-19	A	-p	-0.5502	0.9736	52S	67W	56	113	02m16s
-2495-Aug-03	13:54:31	59232	6065	-55589	-14	T	-p	0.6474	1.0438	61N	123W	49	192	02m58s
-2494-Jan-28	13:16:36	59218	6062	-55583	-9	A	nn	0.1794	0.9340	13S	131W	80	250	08m46s
-2494-Jul-24	06:18:45	59205	6060	-55577	-4	T	nn	-0.0743	1.0692	20N	29W	86	226	06m12s
-2493-Jan-17	12:52:24	59191	6057	-55571	1	A	p-	0.8853	0.9271	38N	133W	27	590	08m25s
-2493-Jul-13	22:08:07	59178	6055	-55565	6	T	p-	-0.8168	1.0334	31S	88E	35	195	03m06s
-2493-Dec-08	03:05:01	59167	6053	-55560	-27	P	-t	-1.2849	0.4735	69S	137W	0		
-2492-Jan-06	16:39:03	59165	6052	-55559	11	Pb	t-	1.5378	0.0299	66N	169E	0		
-2492-Jun-02	20:14:33	59154	6050	-55554	-22	P	-t	1.1270	0.7499	69N	29W	0		
-2492-Nov-26	16:35:35	59140	6047	-55548	-17	T	-p	-0.5688	1.0380	51S	166E	55	155	02m50s

-2491-May-22	21:39:11	59127	6045	-55542	-12	A	-p	0.3780	0.9486	37N	93E	68	204	05m46s
-2491-Nov-16	08:14:41	59114	6042	-55536	-7	T	n-	0.0963	1.0384	8S	58W	85	129	03m38s
-2490-May-11	23:29:35	59101	6040	-55530	-2	A	p-	-0.3958	0.9738	11S	78E	67	102	03m08s
-2490-Nov-05	21:20:27	59087	6037	-55524	3	A	p-	0.8014	0.9861	42N	122E	36	81	01m15s
-2489-Apr-01	23:19:39	59076	6035	-55519	-30	P	-t	1.4415	0.1753	71N	1E	0		
-2489-May-01	07:48:43	59074	6035	-55518	8	P	t-	-1.1381	0.7444	71S	16E	0		
-2489-Sep-26	09:48:44	59063	6033	-55513	-25	P	-t	-1.4624	0.1789	71S	149W	0		
-2489-Oct-26	03:52:02	59061	6032	-55512	13	P	t-	1.5492	0.0273	71N	82E	0		
-2488-Mar-21	15:43:49	59049	6030	-55507	-20	T	-p	0.6885	1.0716	34N	180E	46	319	05m43s
-2488-Sep-14	09:02:18	59036	6028	-55501	-15	A	-p	-0.7852	0.9234	39S	84W	38	462	08m35s
-2487-Mar-11	08:17:18	59023	6025	-55495	-10	T	nn	-0.0385	1.0517	14S	53W	88	171	04m50s
-2487-Sep-03	12:10:39	59010	6023	-55489	-5	A	nn	-0.0524	0.9734	12N	116W	87	95	03m06s
-2486-Feb-28	20:23:43	58996	6020	-55483	0	A	p-	-0.8189	0.9876	67S	154E	35	76	00m54s
-2486-Aug-23	22:46:46	58983	6018	-55477	5	T	p-	0.6611	1.0272	59N	98E	48	123	01m58s
-2485-Jan-19	08:08:17	58972	6015	-55472	-28	P	-t	1.3438	0.3772	66N	49W	0		
-2485-Jul-15	06:18:50	58959	6013	-55466	-23	P	-t	-1.2356	0.5667	65S	17W	0		
-2485-Aug-13	14:25:18	58956	6012	-55465	15	P	t-	1.3288	0.3879	68N	12E	0		
-2484-Jan-08	08:07:58	58945	6010	-55460	-18	A	-p	0.6315	0.9385	15N	50W	51	294	08m08s
-2484-Jul-03	21:13:27	58932	6008	-55454	-13	T	-p	-0.5368	1.0255	9S	111E	57	102	02m41s
-2484-Dec-27	13:51:11	58919	6005	-55448	-8	A	nn	-0.1026	0.9900	29S	143W	84	35	01m01s
-2483-Jun-23	06:06:04	58905	6003	-55442	-3	A	nn	0.2325	0.9751	35N	33W	76	91	02m34s
-2483-Dec-17	02:22:49	58892	6000	-55436	2	T	p-	-0.7831	1.0304	69S	7W	38	165	01m54s
-2482-Jun-12	08:16:26	58879	5998	-55430	7	A+	t-	1.0129	0.9401	63N	163E	0		
-2482-Nov-07	07:00:52	58868	5996	-55425	-26	P	-t	1.2693	0.5022	61N	30E	0		
-2482-Dec-06	18:04:55	58866	5995	-55424	12	P	t-	-1.4286	0.2025	63S	20E	0		
-2481-May-02	20:40:04	58855	5993	-55419	-21	P	-t	-1.0254	0.9366	61S	170W	0		
-2481-Oct-27	18:33:58	58841	5991	-55413	-16	A	-p	0.6336	0.9729	29N	166E	51	122	02m31s
-2480-Apr-21	07:01:00	58828	5988	-55407	-11	T	nn	-0.2092	1.0435	7S	34W	78	148	03m49s
-2480-Oct-15	22:59:16	58815	5985	-55401	-6	A	nn	-0.0553	0.9297	4S	78E	87	264	07m56s
-2479-Apr-10	22:54:48	58801	5983	-55395	-1	T	p-	0.5419	1.0757	28N	65E	57	288	05m41s
-2479-Oct-04	22:13:45	58788	5980	-55389	4	A	p-	-0.7411	0.9157	37S	64E	42	462	08m36s
-2478-Mar-02	07:39:18	58777	5978	-55384	-29	P	-t	-1.2956	0.4533	62S	74E	0		
-2478-Mar-31	16:00:41	58775	5978	-55383	9	P	t-	1.2811	0.4798	61N	105E	0		

-2478-Aug-25	09:23:32	58764	5976	-55378	-24	P	-t	1.4534	0.1731	62N	53E	0		
-2478-Sep-23	23:41:55	58762	5975	-55377	14	P	t-	-1.3927	0.2896	61S	6W	0		
-2477-Feb-19	17:44:36	58750	5973	-55372	-19	A	-p	-0.5987	0.9731	51S	176W	53	120	02m16s
-2477-Aug-14	21:55:14	58737	5971	-55366	-14	T	-p	0.6850	1.0422	60N	122E	46	193	02m49s
-2476-Feb-08	20:28:32	58724	5968	-55360	-9	A	nn	0.1354	0.9362	13S	120E	82	239	08m10s
-2476-Aug-03	14:15:37	58711	5966	-55354	-4	T	nn	-0.0280	1.0654	21N	150W	89	214	05m44s
-2475-Jan-27	20:17:20	58697	5963	-55348	1	A	p-	0.8497	0.9326	34N	110E	32	473	07m50s
-2475-Jul-24	05:45:14	58684	5961	-55342	6	T	p-	-0.7664	1.0284	26S	31W	40	150	02m44s
-2475-Dec-18	11:34:18	58673	5959	-55337	-27	P	-t	-1.2866	0.4703	68S	82E	0		
-2474-Jan-17	00:36:32	58671	5958	-55336	11	P	t-	1.5113	0.0739	65N	38E	0		
-2474-Jun-14	02:48:03	58660	5956	-55331	-22	P	-t	1.2087	0.6070	68N	142W	0		
-2474-Dec-08	01:24:07	58647	5954	-55325	-17	T	-p	-0.5697	1.0405	54S	35E	55	165	02m57s
-2473-Jun-03	03:55:20	58633	5951	-55319	-12	A	-p	0.4658	0.9473	45N	4W	62	219	05m32s
-2473-Nov-27	17:05:25	58620	5948	-55313	-7	Tm	n-	0.0975	1.0377	12S	168E	84	127	03m36s
-2472-May-22	06:01:44	58607	5946	-55307	-2	A	p-	-0.3099	0.9768	3S	25W	72	87	02m50s
-2472-Nov-16	05:56:49	58593	5943	-55301	3	A	p-	0.8059	0.9832	39N	12W	36	100	01m34s
-2471-Apr-12	06:38:02	58583	5941	-55296	-30	Pe	-t	1.5056	0.0520	71N	125W	0		
-2471-May-11	14:50:03	58580	5941	-55295	8	P	t-	-1.0576	0.8950	71S	105W	0		
-2471-Oct-06	17:40:45	58569	5939	-55290	-25	P	-t	-1.4744	0.1601	72S	77E	0		
-2471-Nov-05	12:04:35	58567	5938	-55289	13	P	t-	1.5524	0.0233	71N	57W	0		
-2470-Apr-01	23:17:36	58556	5936	-55284	-20	T	-p	0.7534	1.0726	42N	59E	41	356	05m23s
-2470-Sep-25	16:47:33	58543	5934	-55278	-15	A	-p	-0.8011	0.9220	43S	154E	36	487	08m14s
-2469-Mar-22	15:48:41	58529	5931	-55272	-10	T	nn	0.0233	1.0515	7S	170W	89	171	04m52s
-2469-Sep-14	20:11:04	58516	5929	-55266	-5	A	nn	-0.0723	0.9736	8N	121E	86	95	03m02s
-2468-Mar-11	03:37:17	58503	5926	-55260	0	A	p-	-0.7619	0.9882	59S	37E	40	64	00m56s
-2468-Sep-03	07:00:57	58490	5924	-55254	5	T	p-	0.6342	1.0271	53N	27W	50	119	02m02s
-2467-Jan-29	15:26:33	58479	5922	-55249	-28	P	-t	1.3804	0.3153	67N	172W	0		
-2467-Feb-28	08:04:28	58477	5921	-55248	10	Pb	t-	-1.5553	0.0134	70S	86E	0		
-2467-Jul-25	14:07:15	58466	5919	-55243	-23	P	-t	-1.2872	0.4675	66S	146W	0		
-2467-Aug-23	22:38:39	58463	5919	-55242	15	P	t-	1.2969	0.4489	69N	125W	0		
-2466-Jan-18	15:46:44	58452	5917	-55237	-18	A	-p	0.6568	0.9433	17N	169W	49	278	07m24s
-2466-Jul-15	04:37:02	58439	5914	-55231	-13	T	-p	-0.5987	1.0185	13S	4W	53	79	01m59s
-2465-Jan-07	22:04:10	58426	5912	-55225	-8	A	nn	-0.0868	0.9959	29S	94E	85	14	00m25s

-2465-Jul-04	12:53:37	58413	5909	-55219	-3	A	nn	0.1601	0.9700	33N	134W	81	109	03m17s
-2465-Dec-28	11:00:26	58399	5907	-55213	2	T	p-	-0.7727	1.0348	72S	129W	39	185	02m10s
-2464-Jun-22	14:40:50	58386	5904	-55207	7	A	t-	0.9325	0.9363	76N	107E	21	669	04m19s
-2464-Nov-17	15:49:42	58375	5902	-55202	-26	P	-t	1.2708	0.4994	61N	113W	0		
-2464-Dec-17	02:50:20	58373	5902	-55201	12	P	t-	-1.4249	0.2091	63S	123W	0		
-2463-May-13	03:20:35	58362	5900	-55196	-21	P	-t	-1.1037	0.7981	61S	79E	0		
-2463-Nov-07	03:03:36	58349	5897	-55190	-16	A	-p	0.6344	0.9695	25N	35E	50	139	02m59s
-2462-May-02	14:10:58	58335	5894	-55184	-11	T	-n	-0.2847	1.0473	7S	143W	73	163	04m10s
-2462-Oct-27	07:02:59	58322	5892	-55178	-6	Am	nn	-0.0511	0.9270	8S	45W	87	275	08m19s
-2461-Apr-22	06:20:21	58309	5889	-55172	-1	T	p-	0.4691	1.0787	28N	47W	62	285	05m52s
-2461-Oct-16	06:08:33	58296	5887	-55166	4	A	p-	-0.7321	0.9151	41S	58W	43	461	08m21s
-2460-Mar-12	15:10:47	58285	5885	-55161	-29	P	-t	-1.3567	0.3394	61S	50W	0		
-2460-Apr-10	23:24:17	58282	5884	-55160	9	P	t-	1.2150	0.6063	61N	16W	0		
-2460-Sep-04	17:23:37	58271	5882	-55155	-24	P	-t	1.4737	0.1368	62N	78W	0		
-2460-Oct-04	07:50:00	58269	5882	-55154	14	P	t-	-1.3788	0.3134	60S	138W	0		
-2459-Mar-02	00:57:57	58258	5880	-55149	-19	A	-p	-0.6566	0.9722	51S	79E	49	131	02m18s
-2459-Aug-25	06:05:52	58245	5877	-55143	-14	T	-p	0.7149	1.0405	58N	2E	44	193	02m41s
-2458-Feb-19	03:29:24	58232	5875	-55137	-9	Am	nn	0.0825	0.9384	14S	14E	85	229	07m34s
-2458-Aug-14	22:21:12	58219	5872	-55131	-4	T	nn	0.0107	1.0612	21N	88E	89	201	05m16s
-2457-Feb-08	03:33:03	58205	5870	-55125	1	A	p-	0.8059	0.9385	31N	3W	36	379	07m06s
-2457-Aug-04	13:28:14	58192	5867	-55119	6	T	p-	-0.7216	1.0229	23S	150W	44	112	02m14s
-2457-Dec-29	19:59:19	58181	5865	-55114	-27	P	-t	-1.2926	0.4594	67S	57W	0		
-2456-Jan-28	08:26:37	58179	5865	-55113	11	P	t-	1.4779	0.1306	64N	92W	0		
-2456-Jun-24	09:23:35	58168	5863	-55108	-22	P	-t	1.2876	0.4699	67N	106E	0		
-2456-Jul-23	23:06:44	58166	5862	-55107	16	Pb	t-	-1.5213	0.0588	65S	53E	0		
-2456-Dec-18	10:08:37	58155	5860	-55102	-17	T	-p	-0.5743	1.0435	57S	94W	55	178	03m06s
-2455-Jun-13	10:15:23	58142	5858	-55096	-12	A	-p	0.5503	0.9456	54N	101W	56	241	05m19s
-2455-Dec-08	01:53:55	58128	5855	-55090	-7	T	nn	0.0969	1.0374	15S	34E	85	126	03m37s
-2454-Jun-02	12:37:26	58115	5853	-55084	-2	A	nn	-0.2261	0.9794	5N	128W	77	75	02m32s
-2454-Nov-27	14:31:55	58102	5850	-55078	3	A	p-	0.8101	0.9809	36N	146W	36	116	01m52s
-2453-May-22	21:53:24	58089	5848	-55072	8	T	t-	-0.9774	1.0220	61S	119E	11	375	01m36s
-2453-Oct-18	01:37:36	58078	5846	-55067	-25	P	-t	-1.4817	0.1489	72S	58W	0		
-2453-Nov-16	20:17:04	58076	5845	-55066	13	P	t-	1.5565	0.0176	70N	164E	0		

-2452-Apr-12	06:46:22	58065	5843	-55061	-20	T	-p	0.8225	1.0724	52N	63W	34	412	04m57s
-2452-Oct-06	00:40:35	58051	5841	-55055	-15	A	-p	-0.8108	0.9212	48S	30E	36	503	07m52s
-2451-Apr-01	23:13:57	58038	5838	-55049	-10	T	nn	0.0894	1.0506	1N	74E	85	168	04m48s
-2451-Sep-25	04:19:29	58025	5836	-55043	-5	A	nn	-0.0863	0.9742	3N	4W	85	93	02m56s
-2450-Mar-22	10:43:43	58012	5833	-55037	0	A	p-	-0.7000	0.9884	50S	77W	45	57	01m00s
-2450-Sep-14	15:23:44	57999	5831	-55031	5	T	p-	0.6140	1.0270	48N	154W	52	116	02m06s
-2449-Feb-09	22:34:56	57988	5829	-55026	-28	P	-t	1.4245	0.2405	68N	68E	0		
-2449-Mar-11	14:51:55	57985	5828	-55025	10	P	t-	-1.4951	0.1155	71S	31W	0		
-2449-Aug-05	22:02:46	57974	5826	-55020	-23	P	-t	-1.3327	0.3810	67S	82E	0		
-2449-Sep-04	07:00:04	57972	5826	-55019	15	P	t-	1.2719	0.4966	70N	95E	0		
-2448-Jan-29	23:16:36	57961	5824	-55014	-18	A	-p	0.6898	0.9483	21N	74E	46	262	06m31s
-2448-Jul-25	12:07:43	57948	5821	-55008	-13	H	-p	-0.6536	1.0112	17S	120W	49	51	01m12s
-2447-Jan-18	06:08:09	57935	5819	-55002	-8	H	nn	-0.0629	1.0022	27S	27W	86	8	00m14s
-2447-Jul-14	19:48:43	57922	5816	-54996	-3	Am	nn	0.0951	0.9646	30N	122E	84	128	04m05s
-2446-Jan-07	19:30:50	57909	5814	-54990	2	T	p-	-0.7563	1.0396	73S	114E	41	204	02m29s
-2446-Jul-03	21:11:08	57895	5811	-54984	7	A	p-	0.8567	0.9361	78N	51E	31	465	04m42s
-2446-Nov-29	00:37:03	57884	5809	-54979	-26	P	-t	1.2732	0.4949	62N	104E	0		
-2446-Dec-28	11:30:23	57882	5809	-54978	12	P	t-	-1.4174	0.2228	64S	95E	0		
-2445-May-24	10:02:31	57871	5807	-54973	-21	P	-t	-1.1813	0.6600	62S	32W	0		
-2445-Nov-18	11:33:17	57858	5804	-54967	-16	A	-p	0.6347	0.9668	22N	97W	50	152	03m24s
-2444-May-12	21:19:17	57845	5802	-54961	-11	T	-n	-0.3625	1.0503	7S	109E	69	178	04m29s
-2444-Nov-06	15:09:33	57832	5799	-54955	-6	A	nn	-0.0496	0.9250	13S	169W	87	283	08m39s
-2443-May-02	13:43:27	57819	5797	-54949	-1	T	p-	0.3938	1.0807	28N	158W	67	281	06m02s
-2443-Oct-26	14:07:54	57805	5794	-54943	4	A	p-	-0.7264	0.9150	45S	178E	43	459	08m04s
-2442-Mar-23	22:35:16	57794	5792	-54938	-29	P	-t	-1.4228	0.2166	61S	172W	0		
-2442-Apr-22	06:44:19	57792	5792	-54937	9	P	t-	1.1464	0.7374	61N	137W	0		
-2442-Sep-16	01:33:01	57781	5790	-54932	-24	P	-t	1.4875	0.1121	61N	149E	0		
-2442-Oct-15	16:05:04	57779	5789	-54931	14	P	t-	-1.3697	0.3290	60S	87E	0		
-2441-Mar-13	08:02:01	57768	5787	-54926	-19	A	-p	-0.7211	0.9710	50S	25W	44	148	02m23s
-2441-Sep-05	14:24:33	57755	5785	-54920	-14	T	-p	0.7387	1.0388	55N	122W	42	192	02m34s
-2440-Mar-01	10:21:04	57742	5782	-54914	-9	A	nn	0.0224	0.9407	14S	90W	89	220	07m01s
-2440-Aug-25	06:34:27	57729	5780	-54908	-4	T	nn	0.0428	1.0570	20N	36W	87	188	04m49s
-2439-Feb-18	10:40:27	57715	5777	-54902	1	A	p-	0.7543	0.9445	28N	113W	41	304	06m18s

-2439-Aug-14	21:19:21	57702	5775	-54896	6	T	p-	-0.6841	1.0171	21S	88E	47	80	01m40s
-2438-Jan-09	04:18:10	57691	5773	-54891	-27	P	-t	-1.3047	0.4372	65S	165E	0		
-2438-Feb-07	16:09:56	57689	5772	-54890	11	P	t-	1.4378	0.2001	63N	141E	0		
-2438-Jul-05	16:04:03	57678	5770	-54885	-22	P	-t	1.3614	0.3431	66N	7W	0		
-2438-Aug-04	06:21:57	57676	5770	-54884	16	P	t-	-1.4754	0.1419	64S	68W	0		
-2438-Dec-29	18:47:25	57665	5768	-54879	-17	T	-p	-0.5842	1.0467	60S	140E	54	192	03m16s
-2437-Jun-24	16:41:02	57652	5765	-54873	-12	A	-p	0.6305	0.9435	62N	164E	51	270	05m08s
-2437-Dec-19	10:36:03	57639	5763	-54867	-7	T	nn	0.0915	1.0375	17S	99W	85	127	03m38s
-2436-Jun-12	19:18:33	57626	5760	-54861	-2	A	nn	-0.1456	0.9813	12N	129E	82	67	02m17s
-2436-Dec-07	23:01:51	57612	5758	-54855	3	A	p-	0.8108	0.9792	34N	81E	36	126	02m06s
-2435-Jun-02	05:00:53	57599	5755	-54849	8	T	t-	-0.8997	1.0287	45S	5W	26	223	02m24s
-2435-Oct-28	09:37:10	57588	5753	-54844	-25	P	-t	-1.4865	0.1418	71S	165E	0		
-2435-Nov-27	04:25:59	57586	5753	-54843	13	P	t-	1.5580	0.0156	69N	27E	0		
-2434-Apr-23	14:11:53	57575	5751	-54838	-20	T	-t	0.8942	1.0709	62N	171E	26	516	04m23s
-2434-Oct-17	08:40:46	57562	5748	-54832	-15	A	-p	-0.8153	0.9212	53S	96W	35	510	07m28s
-2433-Apr-13	06:31:13	57549	5746	-54826	-10	T	-n	0.1616	1.0490	9N	40W	81	165	04m37s
-2433-Oct-06	12:37:14	57536	5743	-54820	-5	A	nn	-0.0934	0.9751	2S	131W	85	89	02m47s
-2432-Apr-01	17:39:57	57523	5741	-54814	0	A	p-	-0.6304	0.9881	41S	172E	51	54	01m07s
-2432-Sep-24	23:55:14	57510	5738	-54808	5	T	p-	0.6006	1.0270	42N	75E	53	114	02m10s
-2431-Feb-20	05:33:05	57499	5736	-54803	-28	P	-t	1.4763	0.1520	69N	51W	0		
-2431-Mar-21	21:29:58	57496	5736	-54802	10	P	t-	-1.4275	0.2308	71S	145W	0		
-2431-Aug-16	06:06:41	57485	5734	-54797	-23	P	-t	-1.3710	0.3090	68S	53W	0		
-2431-Sep-14	15:30:06	57483	5733	-54796	15	P	t-	1.2540	0.5304	71N	48W	0		
-2430-Feb-09	06:40:08	57472	5731	-54791	-18	A	-p	0.7287	0.9534	26N	41W	43	248	05m35s
-2430-Aug-05	19:43:31	57459	5729	-54785	-13	H	-p	-0.7031	1.0037	23S	121E	45	18	00m24s
-2429-Jan-29	14:06:54	57446	5726	-54779	-8	H	nn	-0.0337	1.0088	25S	148W	88	30	00m54s
-2429-Jul-26	02:48:35	57433	5724	-54773	-3	A	nn	0.0350	0.9591	26N	17E	88	149	04m57s
-2428-Jan-19	03:54:19	57420	5721	-54767	2	T	p-	-0.7338	1.0448	71S	0E	42	221	02m50s
-2428-Jul-14	03:48:37	57407	5719	-54761	7	A	p-	0.7863	0.9350	75N	18W	38	395	05m08s
-2428-Dec-09	09:20:14	57396	5717	-54756	-26	P	-t	1.2786	0.4849	63N	38W	0		
-2427-Jan-07	20:03:09	57394	5716	-54755	12	P	t-	-1.4047	0.2462	65S	45W	0		
-2427-Jun-03	16:49:56	57383	5714	-54750	-21	P	-t	-1.2554	0.5271	62S	145W	0		
-2427-Jul-03	05:12:38	57381	5714	-54749	17	Pb	t-	1.4985	0.1024	64N	176W	0		

-2427-Nov-28	19:58:35	57370	5712	-54744	-16	A	-p	0.6378	0.9646	19N	133E	50	163	03m49s
-2426-May-24	04:31:38	57356	5709	-54738	-11	T	-p	-0.4376	1.0524	9S	1W	64	191	04m45s
-2426-Nov-17	23:14:47	57343	5707	-54732	-6	A	nn	-0.0475	0.9237	17S	67E	87	288	08m58s
-2425-May-13	21:05:22	57330	5705	-54726	-1	T	n-	0.3175	1.0817	28N	91E	71	277	06m12s
-2425-Nov-06	22:10:05	57317	5702	-54720	4	A	p-	-0.7228	0.9156	49S	54E	43	456	07m46s
-2424-Apr-03	05:51:00	57306	5700	-54715	-29	Pe	-t	-1.4948	0.0832	61S	69E	0		
-2424-May-02	14:00:03	57304	5700	-54714	9	P	t-	1.0751	0.8732	61N	103E	0		
-2424-Sep-26	09:51:28	57293	5698	-54709	-24	P	-t	1.4949	0.0985	61N	13E	0		
-2424-Oct-26	00:24:54	57291	5697	-54708	14	P	t-	-1.3638	0.3389	61S	48W	0		
-2423-Mar-23	14:55:37	57280	5695	-54703	-19	A	-p	-0.7931	0.9690	50S	125W	37	179	02m30s
-2423-Sep-15	22:52:56	57267	5693	-54697	-14	T	-p	0.7549	1.0374	52N	110E	41	189	02m30s
-2422-Mar-12	17:03:14	57254	5690	-54691	-9	A	nn	-0.0455	0.9429	14S	168E	87	211	06m34s
-2422-Sep-05	14:55:29	57241	5688	-54685	-4	Tm	nn	0.0682	1.0526	18N	163W	86	175	04m24s
-2421-Mar-01	17:39:50	57228	5685	-54679	1	A	p-	0.6953	0.9507	25N	140E	46	245	05m27s
-2421-Aug-26	05:17:45	57214	5683	-54673	6	H	p-	-0.6533	1.0111	20S	35W	49	50	01m04s
-2420-Jan-20	12:29:23	57204	5681	-54668	-27	P	-t	-1.3235	0.4023	65S	30E	0		
-2420-Feb-18	23:44:18	57201	5680	-54667	11	P	t-	1.3895	0.2853	62N	16E	0		
-2420-Jul-15	22:50:16	57190	5678	-54662	-22	P	-t	1.4295	0.2272	65N	121W	0		
-2420-Aug-14	13:45:14	57188	5678	-54661	16	P	t-	-1.4365	0.2118	63S	169E	0		
-2419-Jan-09	03:19:55	57177	5676	-54656	-17	T	-p	-0.5996	1.0502	61S	17E	53	209	03m26s
-2419-Jul-04	23:13:27	57164	5673	-54650	-12	A	-p	0.7051	0.9410	69N	71E	45	310	04m59s
-2419-Dec-29	19:12:45	57151	5671	-54644	-7	T	nn	0.0819	1.0380	19S	131E	85	128	03m40s
-2418-Jun-24	02:06:38	57138	5668	-54638	-2	A	nn	-0.0698	0.9828	19N	24E	86	61	02m02s
-2418-Dec-19	07:27:22	57125	5666	-54632	3	A	p-	0.8088	0.9780	32N	50W	36	133	02m17s
-2417-Jun-13	12:11:56	57112	5663	-54626	8	T	t-	-0.8238	1.0330	35S	121W	34	197	03m00s
-2417-Nov-08	17:39:01	57101	5661	-54621	-25	P	-t	-1.4889	0.1382	71S	29E	0		
-2417-Dec-08	12:31:48	57099	5661	-54620	13	P	t-	1.5577	0.0166	69N	109W	0		
-2416-May-03	21:35:12	57088	5659	-54615	-20	T	-t	0.9677	1.0671	73N	22E	14	906	03m40s
-2416-Jun-02	04:02:03	57086	5659	-54614	18	Pb	t-	-1.5177	0.0192	69S	26E	0		
-2416-Oct-27	16:44:53	57075	5656	-54609	-15	A	-p	-0.8168	0.9218	57S	139E	35	509	07m04s
-2415-Apr-23	13:45:00	57062	5654	-54603	-10	T	-n	0.2358	1.0466	18N	153W	76	159	04m20s
-2415-Oct-16	21:00:52	57049	5652	-54597	-5	A	nn	-0.0966	0.9766	7S	100E	84	84	02m35s
-2414-Apr-13	00:30:26	57036	5649	-54591	0	A	p-	-0.5571	0.9872	32S	63E	56	54	01m17s

-2414-Oct-06	08:32:44	57023	5647	-54585	5	T	p-	0.5918	1.0273	37N	57W	53	114	02m15s
-2413-Mar-03	12:22:25	57012	5645	-54580	-28	Pe	-t	1.5346	0.0520	70N	168W	0		
-2413-Apr-02	04:00:39	57009	5644	-54579	10	P	t-	-1.3539	0.3565	72S	101E	0		
-2413-Aug-27	14:18:18	56999	5642	-54574	-23	P	-t	-1.4025	0.2505	69S	170E	0		
-2413-Sep-26	00:06:58	56996	5642	-54573	15	P	t-	1.2423	0.5524	71N	168E	0		
-2412-Feb-20	13:53:09	56985	5640	-54568	-18	A	-p	0.7765	0.9584	33N	156W	39	239	04m38s
-2412-Aug-16	03:27:54	56972	5637	-54562	-13	A	-p	-0.7444	0.9964	28S	0W	42	19	00m22s
-2411-Feb-08	21:56:21	56959	5635	-54556	-8	H	nn	0.0037	1.0154	20S	93E	90	53	01m35s
-2411-Aug-05	09:56:52	56946	5632	-54550	-3	A	nn	-0.0173	0.9536	21N	92W	89	170	05m51s
-2410-Jan-29	12:09:23	56933	5630	-54544	2	T	p-	-0.7042	1.0501	67S	115W	45	235	03m15s
-2410-Jul-25	10:34:53	56920	5627	-54538	7	A	p-	0.7231	0.9334	70N	105W	43	362	05m37s
-2410-Dec-20	17:58:30	56909	5625	-54533	-26	P	-t	1.2877	0.4681	64N	179W	0		
-2409-Jan-19	04:27:51	56907	5625	-54532	12	P	t-	-1.3861	0.2809	66S	176E	0		
-2409-Jun-14	23:40:51	56896	5623	-54527	-21	P	-t	-1.3271	0.3978	63S	101E	0		
-2409-Jul-14	12:05:59	56894	5623	-54526	17	P	t-	1.4291	0.2234	65N	68E	0		
-2409-Dec-10	04:21:02	56883	5620	-54521	-16	A	-p	0.6424	0.9630	18N	3E	50	172	04m09s
-2408-Jun-03	11:45:48	56870	5618	-54515	-11	T	-p	-0.5118	1.0537	11S	112W	59	205	04m57s
-2408-Nov-28	07:18:10	56857	5616	-54509	-6	A	nn	-0.0444	0.9232	20S	55W	87	290	09m13s
-2407-May-24	04:28:01	56844	5613	-54503	-1	T	n-	0.2418	1.0818	28N	19W	76	271	06m20s
-2407-Nov-17	06:14:12	56831	5611	-54497	4	A	p-	-0.7207	0.9168	53S	70W	44	449	07m26s
-2406-May-13	21:13:47	56818	5608	-54491	9	T+	t-	1.0025	1.0105	61N	16W	0		
-2406-Oct-07	18:16:57	56807	5606	-54486	-24	P	-t	1.4977	0.0932	61N	124W	0		
-2406-Nov-06	08:48:41	56805	5606	-54485	14	P	t-	-1.3603	0.3446	61S	175E	0		
-2405-Apr-03	21:42:06	56794	5604	-54480	-19	A	-t	-0.8698	0.9663	52S	137E	29	240	02m40s
-2405-Sep-27	07:28:08	56781	5601	-54474	-14	T	-p	0.7662	1.0362	48N	22W	40	186	02m29s
-2404-Mar-22	23:36:55	56768	5599	-54468	-9	A	nn	-0.1204	0.9448	13S	69E	83	205	06m12s
-2404-Sep-15	23:24:02	56755	5596	-54462	-4	T	-n	0.0871	1.0485	15N	69E	85	162	04m02s
-2403-Mar-12	00:32:58	56742	5594	-54456	1	A	p-	0.6300	0.9566	24N	34E	51	198	04m39s
-2403-Sep-05	13:23:03	56729	5591	-54450	6	H	p-	-0.6290	1.0053	21S	160W	51	23	00m30s
-2402-Jan-30	20:33:34	56718	5589	-54445	-27	P	-t	-1.3489	0.3547	64S	102W	0		
-2402-Mar-01	07:13:01	56716	5589	-54444	11	P	t-	1.3353	0.3823	62N	107W	0		
-2402-Jul-27	05:44:12	56705	5587	-54439	-22	P	-t	1.4904	0.1247	64N	124E	0		
-2402-Aug-25	21:16:13	56703	5587	-54438	16	P	t-	-1.4041	0.2695	62S	45E	0		

-2401-Jan-20	11:44:27	56692	5585	-54433	-17	T	-p	-0.6220	1.0536	61S	103W	51	227	03m35s
-2401-Jul-16	05:53:56	56679	5582	-54427	-12	A	-p	0.7731	0.9382	74N	16W	39	364	04m54s
-2400-Jan-10	03:41:07	56666	5580	-54421	-7	T	nn	0.0657	1.0387	20S	3E	86	130	03m42s
-2400-Jul-04	09:03:34	56653	5577	-54415	-2	A	nn	-0.0003	0.9838	24N	82W	90	58	01m52s
-2400-Dec-29	15:43:33	56640	5575	-54409	3	A	p-	0.7998	0.9775	30N	180W	37	134	02m24s

24TH CENTURY BCE

In the 24th century BCE the total number of solar eclipses was 249 solar eclipses: 94 partial solar eclipses, 88 annular solar eclipses (87 central annular solar eclipses with two limits, 1 central annular solar eclipses with one limit, 0 non-central annular solar eclipses with one limit), 67 total solar eclipses (67 central total solar eclipses with two limits, 0 central total solar eclipses with one limit, 0 non-central total solar eclipses with one limit), 0 hybrid solar eclipses.

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°	°	ALT	WIDTH	DUR.
		GREATEST		S								°	km	
		ECLIPSE												
-2399-Jun-23	19:30:29	56627	5572	-54403	8	T	p-	-0.7531	1.0360	27S	123E	41	184	03m27s
-2399-Nov-19	01:40:56	56616	5570	-54398	-25	P	-t	-1.4913	0.1345	70S	107W	0		
-2399-Dec-18	20:31:30	56614	5570	-54397	13	P	t-	1.5527	0.0251	68N	118E	0		
-2398-May-15	04:56:55	56603	5568	-54392	-20	P	-t	1.0423	0.9429	71N	149W	0		
-2398-Jun-13	11:28:30	56601	5567	-54391	18	P	t-	-1.4480	0.1547	68S	100W	0		
-2398-Nov-08	00:52:59	56590	5565	-54386	-15	A	-p	-0.8157	0.9232	61S	13E	35	500	06m39s
-2397-May-04	20:53:26	56577	5563	-54380	-10	T	-p	0.3139	1.0434	26N	96E	72	152	03m56s
-2397-Oct-28	05:30:23	56564	5561	-54374	-5	A	nn	-0.0955	0.9786	11S	30W	84	77	02m20s

-2396-Apr-23	07:12:54	56551	5558	-54368	0	A	p-	-0.4781	0.9857	23S	43W	61	57	01m32s
-2396-Oct-16	17:16:59	56538	5556	-54362	5	T	p-	0.5884	1.0278	33N	168E	54	116	02m22s
-2395-Apr-12	10:25:07	56525	5553	-54356	10	P	t-	-1.2754	0.4910	72S	11W	0		
-2395-Sep-06	22:37:04	56514	5551	-54351	-23	P	-t	-1.4279	0.2040	70S	31E	0		
-2395-Oct-06	08:49:27	56512	5551	-54350	15	P	t-	1.2355	0.5651	71N	21E	0		
-2394-Mar-02	21:01:00	56501	5549	-54345	-18	A	-p	0.8293	0.9631	40N	90E	34	237	03m46s
-2394-Aug-27	11:18:51	56488	5546	-54339	-13	A	-p	-0.7792	0.9891	33S	124W	39	61	01m05s
-2393-Feb-20	05:39:39	56475	5544	-54333	-8	T	nn	0.0473	1.0220	15S	25W	87	75	02m16s
-2393-Aug-16	17:11:53	56462	5541	-54327	-3	A	nn	-0.0633	0.9481	17N	158E	86	191	06m43s
-2392-Feb-09	20:17:13	56449	5539	-54321	2	T	p-	-0.6683	1.0555	62S	126E	48	247	03m43s
-2392-Aug-04	17:30:44	56436	5537	-54315	7	A	p-	0.6673	0.9315	64N	158E	48	346	06m09s
-2392-Dec-31	02:29:04	56425	5535	-54310	-26	P	-t	1.3025	0.4407	65N	42E	0		
-2391-Jan-29	12:43:37	56423	5534	-54309	12	P	t-	-1.3609	0.3283	67S	40E	0		
-2391-Jun-25	06:40:46	56412	5532	-54304	-21	P	-t	-1.3924	0.2799	64S	16W	0		
-2391-Jul-24	19:10:51	56410	5532	-54303	17	P	t-	1.3676	0.3304	66N	50W	0		
-2391-Dec-20	12:36:36	56399	5530	-54298	-16	A	-p	0.6517	0.9619	17N	124W	49	181	04m27s
-2390-Jun-14	19:05:13	56386	5527	-54292	-11	T	-p	-0.5822	1.0542	13S	136E	54	219	05m04s
-2390-Dec-09	15:16:55	56373	5525	-54286	-6	A	nn	-0.0380	0.9233	23S	176W	88	290	09m26s
-2389-Jun-04	11:52:35	56360	5522	-54280	-1	T	n-	0.1680	1.0810	28N	130W	80	265	06m27s
-2389-Nov-28	14:16:17	56347	5520	-54274	4	A	p-	-0.7162	0.9189	57S	169E	44	437	07m05s
-2388-May-24	04:26:12	56334	5517	-54268	9	T	t-	0.9294	1.0434	67N	87W	21	395	02m28s
-2388-Oct-18	02:49:07	56323	5515	-54263	-24	P	-t	1.4962	0.0953	61N	97E	0		
-2388-Nov-16	17:13:41	56321	5515	-54262	14	P	t-	-1.3569	0.3499	61S	38E	0		
-2387-Apr-14	04:21:03	56310	5513	-54257	-19	A	-t	-0.9517	0.9621	56S	47E	17	442	02m53s
-2387-Oct-07	16:09:53	56297	5511	-54251	-14	T	-p	0.7726	1.0355	44N	156W	39	184	02m30s
-2386-Apr-03	06:03:53	56284	5508	-54245	-9	A	nn	-0.2007	0.9464	13S	28W	78	201	05m57s
-2386-Sep-27	08:00:07	56271	5506	-54239	-4	T	-n	0.0996	1.0445	11N	62W	84	149	03m42s
-2385-Mar-23	07:18:15	56258	5503	-54233	1	A	p-	0.5572	0.9625	22N	68W	56	160	03m55s
-2385-Sep-16	21:36:09	56245	5501	-54227	6	A	p-	-0.6119	0.9995	23S	73E	52	2	00m03s
-2384-Feb-11	04:29:46	56234	5499	-54222	-27	P	-t	-1.3815	0.2932	63S	127E	0		
-2384-Mar-11	14:34:14	56232	5498	-54221	11	P	t-	1.2740	0.4936	61N	132E	0		
-2384-Aug-06	12:46:26	56221	5496	-54216	-22	Pe	-t	1.5439	0.0359	63N	7E	0		
-2384-Sep-05	04:55:47	56219	5496	-54215	16	P	t-	-1.3791	0.3138	61S	80W	0		

-2383-Jan-30	20:01:04	56208	5494	-54210	-17	T	-p	-0.6513	1.0569	61S	138E	49	247	03m44s
-2383-Jul-26	12:44:15	56195	5492	-54204	-12	A	-p	0.8335	0.9353	76N	96W	33	439	04m52s
-2382-Jan-20	12:02:32	56182	5489	-54198	-7	T	nn	0.0440	1.0395	21S	124W	88	133	03m43s
-2382-Jul-15	16:07:56	56169	5487	-54192	-2	A	nn	0.0642	0.9844	28N	171E	86	55	01m43s
-2381-Jan-09	23:53:13	56156	5484	-54186	3	A	p-	0.7863	0.9774	28N	53E	38	131	02m27s
-2381-Jul-05	02:54:58	56143	5482	-54180	8	T	p-	-0.6862	1.0380	20S	7E	47	175	03m46s
-2381-Nov-30	09:40:26	56132	5480	-54175	-25	P	-t	-1.4950	0.1282	69S	119E	0		
-2381-Dec-30	04:23:30	56130	5479	-54174	13	P	t-	1.5421	0.0428	66N	13W	0		
-2380-May-25	12:18:50	56120	5477	-54169	-20	P	-t	1.1164	0.7984	70N	86E	0		
-2380-Jun-23	18:59:41	56117	5477	-54168	18	P	t-	-1.3820	0.2832	67S	134E	0		
-2380-Nov-18	09:01:20	56107	5475	-54163	-15	A	-p	-0.8150	0.9252	66S	111W	35	487	06m13s
-2379-May-15	04:01:03	56094	5473	-54157	-10	T	-p	0.3916	1.0394	35N	16W	67	143	03m27s
-2379-Nov-07	14:01:19	56081	5470	-54151	-5	A	nn	-0.0940	0.9812	16S	160W	85	67	02m02s
-2378-May-04	13:52:47	56068	5468	-54145	0	A	p-	-0.3977	0.9837	14S	149W	66	63	01m52s
-2378-Oct-28	02:04:40	56055	5465	-54139	5	T	p-	0.5873	1.0287	28N	33E	54	119	02m31s
-2377-Apr-23	16:43:34	56042	5463	-54133	10	P	t-	-1.1917	0.6343	72S	122W	0		
-2377-Sep-18	07:03:31	56031	5461	-54128	-23	P	-t	-1.4468	0.1700	71S	111W	0		
-2377-Oct-17	17:37:12	56029	5460	-54127	15	P	t-	1.2333	0.5692	72N	127W	0		
-2376-Mar-13	04:00:25	56018	5458	-54122	-18	A	-p	0.8897	0.9672	49N	24W	27	257	02m59s
-2376-Sep-06	19:18:19	56005	5456	-54116	-13	A	-p	-0.8061	0.9823	38S	110E	36	105	01m41s
-2375-Mar-02	13:14:31	55992	5454	-54110	-8	Tm	nn	0.0989	1.0285	9S	142W	84	97	02m54s
-2375-Aug-27	00:36:53	55979	5451	-54104	-3	A	nn	-0.1004	0.9428	12N	44E	84	213	07m30s
-2374-Feb-20	04:16:56	55966	5449	-54098	2	T	p-	-0.6254	1.0607	56S	6E	51	256	04m14s
-2374-Aug-16	00:35:49	55953	5446	-54092	7	A	p-	0.6187	0.9294	58N	54E	52	337	06m42s
-2373-Jan-11	10:52:47	55942	5444	-54087	-26	P	-t	1.3225	0.4038	66N	96W	0		
-2373-Feb-09	20:50:57	55940	5444	-54086	12	P	t-	-1.3294	0.3876	68S	96W	0		
-2373-Jul-06	13:47:18	55930	5442	-54081	-21	P	-t	-1.4528	0.1705	65S	135W	0		
-2373-Aug-05	02:25:25	55927	5442	-54080	17	P	t-	1.3130	0.4255	67N	172W	0		
-2373-Dec-31	20:44:45	55916	5440	-54075	-16	A	-p	0.6663	0.9611	18N	110E	48	188	04m39s
-2372-Jun-25	02:29:38	55904	5437	-54069	-11	T	-p	-0.6491	1.0539	17S	22E	49	233	05m03s
-2372-Dec-19	23:10:49	55891	5435	-54063	-6	A	nn	-0.0282	0.9240	24S	65E	88	287	09m36s
-2371-Jun-14	19:20:14	55878	5432	-54057	-1	T	nn	0.0966	1.0793	26N	118E	84	257	06m32s
-2371-Dec-08	22:16:24	55865	5430	-54051	4	A	p-	-0.7096	0.9216	61S	50E	45	419	06m45s

-2370-Jun-04	11:39:40	55852	5427	-54045	9	T	p-	0.8577	1.0420	68N	179W	31	273	02m31s
-2370-Oct-29	11:25:53	55841	5425	-54040	-24	P	-t	1.4920	0.1020	61N	43W	0		
-2370-Nov-28	01:39:15	55839	5425	-54039	14	P	t-	-1.3531	0.3558	62S	99W	0		
-2369-Apr-25	10:54:02	55828	5423	-54034	-19	P	-t	-1.0372	0.9084	61S	31W	0		
-2369-Oct-19	00:57:05	55815	5421	-54028	-14	T	-p	0.7751	1.0351	41N	68E	39	183	02m33s
-2368-Apr-13	12:25:43	55802	5418	-54022	-9	A	np	-0.2849	0.9476	13S	124W	73	200	05m48s
-2368-Oct-07	16:41:17	55789	5416	-54016	-4	T	-n	0.1076	1.0410	7N	165E	84	138	03m26s
-2367-Apr-02	14:00:07	55776	5413	-54010	1	A	p-	0.4806	0.9680	22N	170W	61	129	03m16s
-2367-Sep-27	05:55:40	55763	5411	-54004	6	A	p-	-0.6009	0.9941	26S	55W	53	25	00m32s
-2366-Feb-21	12:19:19	55753	5409	-53999	-27	P	-t	-1.4203	0.2194	62S	2W	0		
-2366-Mar-22	21:51:09	55751	5409	-53998	11	P	t-	1.2079	0.6151	61N	11E	0		
-2366-Sep-16	12:42:00	55738	5406	-53992	16	P	t-	-1.3599	0.3477	61S	152E	0		
-2365-Feb-11	04:09:25	55727	5404	-53987	-17	T	-p	-0.6878	1.0600	59S	21E	46	271	03m51s
-2365-Aug-06	19:44:37	55714	5402	-53981	-12	A	-p	0.8861	0.9322	75N	177W	27	551	04m52s
-2364-Jan-31	20:12:47	55701	5399	-53975	-7	T	nn	0.0133	1.0404	21S	113E	89	135	03m43s
-2364-Jul-25	23:23:40	55688	5397	-53969	-2	A	nn	0.1204	0.9846	30N	62E	83	55	01m37s
-2363-Jan-20	07:51:50	55675	5394	-53963	3	A	p-	0.7642	0.9776	26N	72W	40	123	02m26s
-2363-Jul-15	10:28:06	55662	5392	-53957	8	T	p-	-0.6256	1.0393	15S	110W	51	169	03m55s
-2363-Dec-10	17:35:37	55651	5390	-53952	-25	P	-t	-1.5021	0.1162	68S	14W	0		
-2362-Jan-09	12:06:30	55649	5390	-53951	13	P	t-	1.5246	0.0719	65N	141W	0		
-2362-Jun-05	19:42:17	55639	5388	-53946	-20	P	-t	1.1891	0.6569	69N	39W	0		
-2362-Jul-05	02:36:23	55636	5387	-53945	18	P	t-	-1.3202	0.4034	66S	7E	0		
-2362-Nov-29	17:10:08	55626	5385	-53940	-15	A	-p	-0.8145	0.9280	70S	126E	35	468	05m47s
-2361-May-26	11:05:16	55613	5383	-53934	-10	T	-p	0.4711	1.0346	44N	125W	62	132	02m54s
-2361-Nov-18	22:35:25	55600	5380	-53928	-5	Am	nn	-0.0908	0.9844	20S	70E	85	55	01m40s
-2360-May-14	20:28:18	55587	5378	-53922	0	A	nn	-0.3145	0.9810	5S	107E	72	71	02m16s
-2360-Nov-07	10:55:11	55574	5376	-53916	5	T	p-	0.5883	1.0302	24N	104W	54	125	02m43s
-2359-May-03	22:59:48	55561	5373	-53910	10	P	t-	-1.1060	0.7812	71S	129E	0		
-2359-Sep-28	15:36:51	55550	5371	-53905	-23	P	-t	-1.4601	0.1467	71S	105E	0		
-2359-Oct-28	02:28:56	55548	5371	-53904	15	P	t-	1.2344	0.5669	71N	84E	0		
-2358-Mar-24	10:56:03	55537	5369	-53899	-18	A	-t	0.9539	0.9703	61N	145W	17	360	02m21s
-2358-Sep-18	03:23:34	55524	5366	-53893	-13	A	-p	-0.8273	0.9758	44S	17W	34	153	02m13s
-2357-Mar-13	20:44:42	55512	5364	-53887	-8	T	nn	0.1553	1.0346	2S	102E	81	118	03m28s

-2357-Sep-07	08:09:13	55499	5362	-53881	-3	A	nn	-0.1305	0.9378	7N	72W	83	233	08m11s
-2356-Mar-02	12:08:53	55486	5359	-53875	2	T	p-	-0.5760	1.0657	48S	114W	55	262	04m47s
-2356-Aug-26	07:51:51	55473	5357	-53869	7	A	p-	0.5790	0.9275	52N	55W	54	334	07m15s
-2355-Jan-21	19:07:12	55462	5355	-53864	-26	P	-t	1.3491	0.3546	67N	127E	0		
-2355-Feb-20	04:49:33	55460	5354	-53863	12	P	t-	-1.2917	0.4590	69S	131E	0		
-2355-Jul-16	21:03:47	55449	5352	-53858	-21	Pe	-t	-1.5060	0.0741	66S	104E	0		
-2355-Aug-15	09:51:00	55447	5352	-53857	17	P	t-	1.2664	0.5067	68N	63E	0		
-2354-Jan-11	04:43:28	55436	5350	-53852	-16	A	-p	0.6876	0.9606	20N	14W	46	197	04m46s
-2354-Jul-06	10:01:50	55423	5348	-53846	-11	T	-p	-0.7098	1.0529	21S	95W	45	248	04m56s
-2354-Dec-31	06:56:29	55410	5345	-53840	-6	A	nn	-0.0118	0.9253	24S	52W	89	282	09m41s
-2353-Jun-26	02:51:48	55398	5343	-53834	-1	T	nn	0.0287	1.0768	24N	5E	88	249	06m33s
-2353-Dec-20	06:11:22	55385	5340	-53828	4	A	p-	-0.6982	0.9251	64S	66W	45	394	06m24s
-2352-Jun-14	18:55:07	55372	5338	-53822	9	T	p-	0.7884	1.0390	68N	86E	38	213	02m28s
-2352-Nov-08	20:05:03	55361	5336	-53817	-24	P	-t	1.4866	0.1106	61N	177E	0		
-2352-Dec-08	10:01:37	55359	5336	-53816	14	P	t-	-1.3461	0.3675	63S	124E	0		
-2351-May-05	17:23:01	55348	5334	-53811	-19	P	-t	-1.1247	0.7547	61S	139W	0		
-2351-Oct-29	09:48:45	55335	5331	-53805	-14	T	-p	0.7740	1.0354	37N	70W	39	184	02m40s
-2350-Apr-24	18:42:30	55323	5329	-53799	-9	A	-p	-0.3733	0.9485	14S	141E	68	202	05m46s
-2350-Oct-19	01:27:50	55310	5326	-53793	-4	T	-n	0.1108	1.0378	3N	31E	84	128	03m12s
-2349-Apr-13	20:37:06	55297	5324	-53787	1	A	p-	0.3990	0.9731	21N	90E	66	104	02m41s
-2349-Oct-08	14:21:14	55284	5322	-53781	6	A	p-	-0.5954	0.9890	30S	175E	53	47	00m58s
-2348-Mar-03	20:00:35	55273	5320	-53776	-27	P	-t	-1.4665	0.1306	62S	128W	0		
-2348-Apr-02	05:02:05	55271	5319	-53775	11	P	t-	1.1355	0.7496	60N	107W	0		
-2348-Sep-26	20:36:02	55258	5317	-53769	16	P	t-	-1.3472	0.3700	61S	23E	0		
-2347-Feb-21	12:10:21	55247	5315	-53764	-17	T	-p	-0.7309	1.0626	58S	95W	43	299	03m57s
-2347-Aug-17	02:54:31	55235	5313	-53758	-12	A	-p	0.9314	0.9290	72N	91E	21	740	04m55s
-2346-Feb-11	04:15:45	55222	5310	-53752	-7	T	nn	-0.0231	1.0411	21S	8W	89	137	03m42s
-2346-Aug-06	06:48:40	55209	5308	-53746	-2	Am	nn	0.1701	0.9847	32N	49W	80	55	01m33s
-2345-Jan-31	15:41:14	55196	5305	-53740	3	A	p-	0.7355	0.9781	24N	167E	42	114	02m23s
-2345-Jul-26	18:08:58	55183	5303	-53734	8	T	p-	-0.5708	1.0399	11S	131E	55	162	03m57s
-2345-Dec-22	01:25:40	55172	5301	-53729	-25	P	-t	-1.5131	0.0974	67S	145W	0		
-2344-Jan-20	19:40:17	55170	5301	-53728	13	P	t-	1.5000	0.1129	64N	93E	0		
-2344-Jun-16	03:09:03	55159	5299	-53723	-20	P	-t	1.2587	0.5221	68N	165W	0		

-2344-Jul-15	10:20:06	55157	5298	-53722	18	P	t-	-1.2640	0.5121	65S	121W	0		
-2344-Dec-10	01:14:48	55147	5296	-53717	-15	A	-p	-0.8181	0.9314	75S	9E	35	450	05m20s
-2343-Jun-05	18:12:00	55134	5294	-53711	-10	T	-p	0.5477	1.0291	52N	126E	57	118	02m19s
-2343-Nov-29	07:08:05	55121	5291	-53705	-5	A	nn	-0.0900	0.9882	23S	60W	85	42	01m14s
-2342-May-26	03:03:03	55108	5289	-53699	0	A	nn	-0.2313	0.9778	3N	4E	77	81	02m44s
-2342-Nov-18	19:46:09	55095	5287	-53693	5	T	p-	0.5892	1.0321	21N	120E	54	133	02m59s
-2341-May-15	05:14:06	55082	5284	-53687	10	P	t-	-1.0180	0.9319	71S	20E	0		
-2341-Oct-10	00:15:48	55072	5282	-53682	-23	P	-t	-1.4685	0.1326	72S	41W	0		
-2341-Nov-08	11:22:02	55069	5282	-53681	15	P	t-	1.2371	0.5618	71N	65W	0		
-2340-Apr-03	17:45:28	55059	5280	-53676	-18	P	-t	1.0238	0.9379	72N	63E	0		
-2340-Sep-28	11:36:33	55046	5278	-53670	-13	A	-p	-0.8413	0.9700	49S	147W	32	198	02m37s
-2339-Mar-24	04:08:54	55033	5275	-53664	-8	T	nn	0.2175	1.0403	5N	13W	77	138	03m56s
-2339-Sep-17	15:49:47	55020	5273	-53658	-3	A	nn	-0.1533	0.9332	1N	170E	81	252	08m45s
-2338-Mar-13	19:54:06	55007	5270	-53652	2	T	p-	-0.5205	1.0702	41S	126E	58	267	05m21s
-2338-Sep-06	15:18:00	54995	5268	-53646	7	A	p-	0.5472	0.9256	46N	168W	57	334	07m48s
-2337-Feb-02	03:12:05	54984	5266	-53641	-26	P	-t	1.3833	0.2916	68N	7W	0		
-2337-Mar-03	12:38:28	54982	5266	-53640	12	P	t-	-1.2464	0.5451	70S	1W	0		
-2337-Aug-26	17:27:47	54969	5263	-53634	17	P	t-	1.2276	0.5741	69N	65W	0		
-2336-Jan-22	12:32:59	54958	5261	-53629	-16	A	-p	0.7159	0.9602	23N	136W	44	207	04m46s
-2336-Jul-16	17:41:26	54945	5259	-53623	-11	T	-p	-0.7652	1.0513	26S	146E	40	264	04m41s
-2335-Jan-10	14:34:05	54933	5257	-53617	-6	A	nn	0.0112	0.9270	23S	167W	89	274	09m41s
-2335-Jul-06	10:29:10	54920	5254	-53611	-1	Tm	nn	-0.0344	1.0735	22N	110W	88	239	06m30s
-2335-Dec-30	14:02:26	54907	5252	-53605	4	A	p-	-0.6830	0.9292	66S	177W	47	365	06m04s
-2334-Jun-26	02:12:37	54894	5249	-53599	9	T	p-	0.7214	1.0351	67N	11W	44	171	02m20s
-2334-Nov-20	04:45:56	54883	5247	-53594	-24	P	-t	1.4809	0.1198	62N	36E	0		
-2334-Dec-19	18:21:59	54881	5247	-53593	14	P	t-	-1.3364	0.3837	64S	13W	0		
-2333-May-16	23:49:24	54870	5245	-53588	-19	P	-t	-1.2129	0.6004	61S	114E	0		
-2333-Jun-15	12:30:09	54868	5245	-53587	19	Pb	t-	1.5437	0.0143	63N	79E	0		
-2333-Nov-09	18:41:45	54858	5243	-53582	-14	T	-p	0.7726	1.0361	34N	151E	39	187	02m50s
-2332-May-05	00:57:47	54845	5240	-53576	-9	A	-p	-0.4631	0.9488	15S	46E	62	209	05m50s
-2332-Oct-29	10:16:49	54832	5238	-53570	-4	T	-n	0.1117	1.0351	1S	104W	84	119	03m02s
-2331-Apr-24	03:14:03	54819	5236	-53564	1	A	p-	0.3159	0.9778	21N	10W	71	83	02m12s
-2331-Oct-18	22:49:27	54806	5233	-53558	6	A	p-	-0.5928	0.9844	34S	45E	53	67	01m21s

-2330-Mar-15	03:36:43	54796	5231	-53553	-27	Pe	-t	-1.5178	0.0315	61S	107E	0			
-2330-Apr-13	12:11:31	54794	5231	-53552	11	P	t-	1.0606	0.8902	60N	135E	0			
-2330-Oct-08	04:35:21	54781	5228	-53546	16	P	t-	-1.3392	0.3841	61S	108W	0			
-2329-Mar-04	20:02:02	54770	5226	-53541	-17	T	-p	-0.7821	1.0646	57S	150E	38	336	04m01s	
-2329-Aug-28	10:15:56	54757	5224	-53535	-12	A	-p	0.9678	0.9258	68N	10W	14	1146	04m58s	
-2328-Feb-22	12:07:26	54744	5222	-53529	-7	T	nn	-0.0685	1.0415	21S	127W	86	139	03m40s	
-2328-Aug-16	14:25:52	54732	5219	-53523	-2	A	nn	0.2106	0.9846	31N	163W	78	56	01m31s	
-2327-Feb-10	23:18:31	54719	5217	-53517	3	A	p-	0.6975	0.9786	22N	49E	46	104	02m18s	
-2327-Aug-06	02:00:24	54706	5215	-53511	8	T	p-	-0.5239	1.0399	9S	10E	58	156	03m53s	
-2326-Jan-01	09:09:09	54695	5213	-53506	-25	P	-t	-1.5293	0.0695	66S	86E	0			
-2326-Jan-31	03:03:58	54693	5212	-53505	13	P	t-	1.4674	0.1673	63N	29W	0			
-2326-Jun-27	10:38:31	54683	5210	-53500	-20	P	-t	1.3258	0.3929	67N	70E	0			
-2326-Jul-26	18:10:03	54680	5210	-53499	18	P	t-	-1.2128	0.6106	64S	109E	0			
-2326-Dec-21	09:17:07	54670	5208	-53494	-15	A	-p	-0.8243	0.9353	78S	101W	34	430	04m52s	
-2325-Jun-17	01:18:42	54657	5205	-53488	-10	T	-p	0.6235	1.0229	60N	18E	51	100	01m44s	
-2325-Dec-10	15:39:14	54644	5203	-53482	-5	A	nn	-0.0911	0.9927	26S	171E	85	26	00m45s	
-2324-Jun-05	09:37:18	54631	5201	-53476	0	A	nn	-0.1486	0.9740	11N	98W	82	94	03m15s	
-2324-Nov-29	04:36:55	54618	5198	-53470	5	T	p-	0.5895	1.0346	18N	17W	54	144	03m16s	
-2323-May-25	11:29:22	54606	5196	-53464	10	A	t-	-0.9305	0.9402	51S	109W	21	608	05m57s	
-2323-Oct-20	08:58:20	54595	5194	-53459	-23	P	-t	-1.4738	0.1242	71S	172E	0			
-2323-Nov-18	20:15:16	54593	5194	-53458	15	P	t-	1.2403	0.5559	70N	146E	0			
-2322-Apr-15	00:33:59	54582	5192	-53453	-18	P	-t	1.0952	0.8124	72N	55W	0			
-2322-Oct-09	19:54:11	54569	5189	-53447	-13	A	-p	-0.8505	0.9647	53S	82E	31	241	02m58s	
-2321-Apr-04	11:28:40	54557	5187	-53441	-8	T	-n	0.2843	1.0455	13N	128W	73	158	04m17s	
-2321-Sep-28	23:37:21	54544	5185	-53435	-3	A	nn	-0.1697	0.9292	4S	50E	80	269	09m13s	
-2320-Mar-24	03:33:08	54531	5182	-53429	2	T	p-	-0.4596	1.0741	33S	7E	62	270	05m53s	
-2320-Sep-16	22:53:42	54518	5180	-53423	7	A	p-	0.5227	0.9241	40N	75E	58	334	08m18s	
-2319-Feb-12	11:06:51	54508	5178	-53418	-26	P	-t	1.4249	0.2147	69N	139W	0			
-2319-Mar-13	20:19:42	54506	5177	-53417	12	P	t-	-1.1954	0.6421	71S	132W	0			
-2319-Sep-06	01:15:43	54493	5175	-53411	17	P	t-	1.1968	0.6277	70N	163E	0			
-2318-Feb-01	20:11:47	54482	5173	-53406	-16	A	-p	0.7521	0.9598	27N	105E	41	221	04m41s	
-2318-Jul-28	01:28:51	54469	5171	-53400	-11	T	-p	-0.8145	1.0492	32S	24E	35	282	04m21s	
-2317-Jan-21	22:02:04	54457	5168	-53394	-6	A	nn	0.0416	0.9292	21S	80E	88	266	09m35s	

-2317-Jul-17	18:12:43	54444	5166	-53388	-1	T	nn	-0.0916	1.0696	19N	133E	85	228	06m21s
-2316-Jan-10	21:44:27	54431	5164	-53382	4	A	p-	-0.6599	0.9340	65S	75E	48	329	05m44s
-2316-Jul-06	09:35:07	54418	5161	-53376	9	T	p-	0.6595	1.0303	64N	112W	48	137	02m07s
-2316-Nov-30	13:25:35	54408	5159	-53371	-24	P	-t	1.4766	0.1261	62N	105W	0		
-2316-Dec-30	02:36:25	54405	5159	-53370	14	P	t-	-1.3217	0.4092	65S	148W	0		
-2315-May-27	06:14:59	54395	5157	-53365	-19	P	-t	-1.3006	0.4477	62S	7E	0		
-2315-Jun-25	19:18:47	54393	5157	-53364	19	P	t-	1.4760	0.1365	64N	35W	0		
-2315-Nov-20	03:35:17	54382	5155	-53359	-14	T	-p	0.7710	1.0372	31N	13E	39	193	03m02s
-2314-May-16	07:12:07	54369	5152	-53353	-9	A	-p	-0.5534	0.9486	17S	49W	56	222	05m58s
-2314-Nov-09	19:08:16	54357	5150	-53347	-4	T	-n	0.1104	1.0330	6S	121E	84	112	02m54s
-2313-May-05	09:48:08	54344	5148	-53341	1	A	nn	0.2293	0.9820	21N	108W	77	65	01m48s
-2313-Oct-30	07:21:49	54331	5145	-53335	6	A	p-	-0.5943	0.9804	38S	87W	53	85	01m40s
-2312-Apr-23	19:18:14	54318	5143	-53329	11	T	t-	0.9823	1.0227	61N	38E	10	435	01m20s
-2312-Oct-18	12:39:27	54305	5141	-53323	16	P	t-	-1.3355	0.3908	61S	121E	0		
-2311-Mar-15	03:47:36	54295	5139	-53318	-17	T	-p	-0.8383	1.0657	56S	37E	33	389	04m01s
-2311-Sep-07	17:47:39	54282	5136	-53312	-12	An	-p	0.9961	0.9217	63N	109W	3	-	04m59s
-2310-Mar-04	19:51:49	54269	5134	-53306	-7	T	-n	-0.1194	1.0416	20S	116E	83	140	03m37s
-2310-Aug-27	22:12:05	54257	5132	-53300	-2	A	nn	0.2447	0.9846	30N	80E	76	56	01m29s
-2309-Feb-22	06:46:51	54244	5129	-53294	3	A	p-	0.6528	0.9792	21N	66W	49	96	02m12s
-2309-Aug-17	10:00:40	54231	5127	-53288	8	T	p-	-0.4837	1.0396	8S	113W	61	151	03m45s
-2308-Jan-12	16:43:41	54220	5125	-53283	-25	Pe	-t	-1.5524	0.0297	65S	40W	0		
-2308-Feb-11	10:16:36	54218	5124	-53282	13	P	t-	1.4261	0.2366	63N	149W	0		
-2308-Jul-07	18:14:13	54208	5123	-53277	-20	P	-t	1.3875	0.2752	66N	57W	0		
-2308-Aug-06	02:08:53	54205	5122	-53276	18	P	t-	-1.1689	0.6946	63S	22W	0		
-2308-Dec-31	17:12:57	54195	5120	-53271	-15	A	-p	-0.8369	0.9396	81S	161E	33	413	04m25s
-2307-Jun-27	08:29:51	54182	5118	-53265	-10	T	-p	0.6946	1.0161	67N	86W	46	77	01m09s
-2307-Dec-21	00:05:43	54169	5115	-53259	-5	A	nn	-0.0972	0.9977	28S	44E	84	8	00m14s
-2306-Jun-16	16:14:29	54157	5113	-53253	0	Am	nn	-0.0688	0.9698	18N	160E	86	109	03m46s
-2306-Dec-10	13:24:05	54144	5111	-53247	5	T	p-	0.5866	1.0376	15N	152W	54	156	03m37s
-2305-Jun-05	17:45:53	54131	5108	-53241	10	A	p-	-0.8436	0.9417	38S	146E	32	401	06m41s
-2305-Oct-31	17:44:17	54121	5106	-53236	-23	P	-t	-1.4761	0.1213	71S	24E	0		
-2305-Nov-30	05:06:50	54118	5106	-53235	15	P	t-	1.2425	0.5518	69N	1W	0		
-2304-Apr-25	07:19:44	54108	5104	-53230	-18	P	-t	1.1697	0.6803	71N	172W	0		

23RD CENTURY BCE

-2299-Feb-01	05:21:22	53983	5081	-53171	-6	A	nn	0.0787	0.9316	17S	31W	86	257	09m24s
-2299-Jul-28	02:02:29	53970	5079	-53165	-1	T	-n	-0.1434	1.0653	15N	14E	82	216	06m06s
-2298-Jan-21	05:20:48	53957	5076	-53159	4	A	p-	-0.6315	0.9392	63S	32W	51	292	05m24s

-2298-Jul-17	17:02:20	53945	5074	-53153	9	T	p-	0.6024	1.0249	61N	143E	53	107	01m51s
-2298-Dec-11	22:03:05	53934	5072	-53148	-24	P	-t	1.4751	0.1272	63N	114E	0		
-2297-Jan-10	10:45:22	53932	5072	-53147	14	P	t-	-1.3013	0.4448	66S	78E	0		
-2297-Jun-07	12:40:47	53921	5070	-53142	-19	P	-t	-1.3870	0.2983	62S	101W	0		
-2297-Jul-07	02:11:10	53919	5069	-53141	19	P	t-	1.4116	0.2517	65N	150W	0		
-2297-Dec-01	12:27:11	53908	5067	-53136	-14	T	-p	0.7712	1.0389	29N	125W	39	202	03m16s
-2296-May-26	13:28:53	53896	5065	-53130	-9	A	-p	-0.6420	0.9479	21S	145W	50	244	06m10s
-2296-Nov-20	03:57:47	53883	5063	-53124	-4	T	-n	0.1104	1.0313	9S	14W	84	106	02m49s
-2295-May-15	16:25:53	53870	5060	-53118	1	A	nn	0.1445	0.9855	21N	152E	82	52	01m28s
-2295-Nov-09	15:54:23	53858	5058	-53112	6	A	p-	-0.5969	0.9770	43S	142E	53	101	01m55s
-2294-May-05	02:24:41	53845	5056	-53106	11	T	t-	0.9025	1.0313	59N	48W	25	243	01m58s
-2294-Oct-29	20:46:21	53832	5053	-53100	16	P	t-	-1.3344	0.3929	61S	12W	0		
-2293-Mar-26	11:25:34	53822	5051	-53095	-17	T	-t	-0.9009	1.0657	56S	72W	25	489	03m56s
-2293-Sep-19	01:30:00	53809	5049	-53089	-12	A+	-t	1.0166	0.9277	61N	130E	0		
-2292-Mar-15	03:25:17	53796	5047	-53083	-7	T	-n	-0.1791	1.0412	19S	2E	80	140	03m32s
-2292-Sep-07	06:10:42	53784	5044	-53077	-2	A	-n	0.2696	0.9847	28N	40W	74	56	01m27s
-2291-Mar-04	14:03:49	53771	5042	-53071	3	A	p-	0.5994	0.9796	20N	178W	53	89	02m07s
-2291-Aug-27	18:10:21	53758	5040	-53065	8	T	p-	-0.4507	1.0391	8S	122E	63	146	03m35s
-2290-Feb-21	17:19:15	53745	5037	-53059	13	P	t-	1.3768	0.3198	62N	94E	0		
-2290-Jul-19	01:55:11	53735	5035	-53054	-20	P	-t	1.4447	0.1671	65N	176E	0		
-2290-Aug-17	10:15:32	53733	5035	-53053	18	P	t-	-1.1313	0.7659	63S	155W	0		
-2289-Jan-12	01:02:48	53722	5033	-53048	-15	A	-p	-0.8549	0.9444	81S	71E	31	400	03m56s
-2289-Jul-08	15:43:44	53709	5031	-53042	-10	H	-p	0.7623	1.0088	74N	175E	40	47	00m36s
-2288-Jan-01	08:27:56	53697	5028	-53036	-5	H	nn	-0.1076	1.0032	30S	82W	84	11	00m19s
-2288-Jun-26	22:54:29	53684	5026	-53030	0	A	nn	0.0078	0.9651	24N	58E	89	126	04m16s
-2288-Dec-20	22:07:32	53671	5024	-53024	5	T	p-	0.5803	1.0410	13N	73E	54	169	03m59s
-2287-Jun-16	00:07:03	53659	5021	-53018	10	A	p-	-0.7599	0.9420	28S	44E	40	330	07m19s
-2287-Nov-11	02:31:38	53648	5020	-53013	-23	P	-t	-1.4771	0.1204	71S	123W	0		
-2287-Dec-10	13:56:03	53646	5019	-53012	15	P	t-	1.2431	0.5507	68N	148W	0		
-2286-May-06	14:05:38	53636	5017	-53007	-18	P	-t	1.2447	0.5458	71N	71E	0		
-2286-Jun-05	01:55:10	53633	5017	-53006	20	Pb	t-	-1.4860	0.1213	69S	39E	0		
-2286-Oct-31	12:40:16	53623	5015	-53001	-13	A	-p	-0.8579	0.9563	62S	179E	31	309	03m24s
-2285-Apr-26	01:59:47	53610	5013	-52995	-8	T	-p	0.4277	1.0536	30N	5E	64	196	04m35s

-2285-Oct-20	15:30:45	53597	5010	-52989	-3	A	nn	-0.1862	0.9230	14S	166E	79	296	09m53s
-2284-Apr-14	18:35:08	53585	5008	-52983	2	T	n-	-0.3237	1.0799	16S	132E	71	272	06m50s
-2284-Oct-08	14:30:46	53572	5006	-52977	7	A	p-	0.4935	0.9222	29N	165W	60	335	09m10s
-2283-Mar-06	02:28:02	53561	5004	-52972	-26	Pe	-t	1.5287	0.0235	70N	38W	0		
-2283-Apr-04	11:19:45	53559	5003	-52971	12	P	t-	-1.0765	0.8679	72S	28W	0		
-2283-Sep-27	17:20:16	53547	5001	-52965	17	P	t-	1.1562	0.6984	71N	109W	0		
-2282-Feb-23	10:56:33	53536	4999	-52960	-16	A	-p	0.8482	0.9584	40N	129W	32	285	04m18s
-2282-Aug-18	17:31:06	53524	4997	-52954	-11	T	-p	-0.8915	1.0439	43S	130E	27	324	03m31s
-2281-Feb-12	12:28:41	53511	4994	-52948	-6	A	nn	0.1256	0.9342	12S	140W	83	247	09m05s
-2281-Aug-08	10:00:29	53498	4992	-52942	-1	T	-n	-0.1880	1.0605	11N	108W	79	202	05m45s
-2280-Feb-01	12:47:16	53486	4990	-52936	4	A	p-	-0.5942	0.9448	58S	140W	53	254	05m03s
-2280-Jul-28	00:36:41	53473	4987	-52930	9	T	p-	0.5519	1.0191	57N	34E	56	79	01m29s
-2280-Dec-22	06:35:38	53462	4985	-52925	-24	P	-t	1.4783	0.1195	64N	25W	0		
-2279-Jan-20	18:46:28	53460	4985	-52924	14	P	t-	-1.2737	0.4938	67S	55W	0		
-2279-Jun-17	19:09:54	53450	4983	-52919	-19	P	-t	-1.4696	0.1566	63S	150E	0		
-2279-Jul-17	09:09:52	53448	4983	-52918	19	P	t-	1.3527	0.3560	66N	94E	0		
-2279-Dec-11	21:16:58	53437	4981	-52913	-14	T	-p	0.7734	1.0410	28N	98E	39	214	03m32s
-2278-Jun-06	19:46:54	53424	4978	-52907	-9	A	-p	-0.7295	0.9465	25S	119E	43	282	06m21s
-2278-Dec-01	12:47:07	53412	4976	-52901	-4	T	-n	0.1101	1.0302	13S	148W	84	103	02m47s
-2277-May-26	23:04:42	53399	4974	-52895	1	A	nn	0.0599	0.9886	20N	52E	86	40	01m11s
-2277-Nov-21	00:26:48	53386	4972	-52889	6	A	p-	-0.6000	0.9743	48S	12E	53	114	02m07s
-2276-May-15	09:31:51	53374	4969	-52883	11	T	t-	0.8222	1.0373	58N	146W	34	218	02m25s
-2276-Nov-09	04:55:15	53361	4967	-52877	16	P	t-	-1.3356	0.3912	61S	144W	0		
-2275-Apr-05	18:59:25	53351	4965	-52872	-17	T	-t	-0.9671	1.0636	59S	175W	14	829	03m39s
-2275-May-05	01:33:04	53348	4965	-52871	21	Pb	t-	1.5210	0.0128	61N	89W	0		
-2275-Sep-29	09:20:12	53338	4963	-52866	-12	P	-t	1.0314	0.9027	61N	1E	0		
-2274-Mar-26	10:52:54	53325	4960	-52860	-7	T	-n	-0.2429	1.0402	18S	111W	76	138	03m26s
-2274-Sep-18	14:17:53	53313	4958	-52854	-2	A	-n	0.2884	0.9850	24N	163W	73	55	01m24s
-2273-Mar-15	21:10:50	53300	4956	-52848	3	A	p-	0.5387	0.9798	19N	73E	57	84	02m03s
-2273-Sep-08	02:29:19	53287	4953	-52842	8	T	p-	-0.4249	1.0384	9S	5W	65	141	03m25s
-2272-Mar-04	00:11:49	53275	4951	-52836	13	P	t-	1.3195	0.4169	61N	20W	0		
-2272-Jul-29	09:43:50	53264	4949	-52831	-20	Pe	-t	1.4952	0.0729	64N	47E	0		
-2272-Aug-27	18:30:44	53262	4949	-52830	18	P	t-	-1.1010	0.8226	62S	70E	0		

-2271-Jan-22	08:44:08	53252	4947	-52825	-15	A	-p	-0.8807	0.9492	78S	22W	28	398	03m29s
-2271-Jul-18	23:04:27	53239	4945	-52819	-10	H	-p	0.8233	1.0011	77N	87E	34	7	00m04s
-2270-Jan-11	16:43:28	53226	4942	-52813	-5	H	nn	-0.1245	1.0091	31S	155E	83	32	00m53s
-2270-Jul-08	05:38:52	53214	4940	-52807	0	A	nn	0.0800	0.9601	29N	44W	85	145	04m45s
-2269-Jan-01	06:45:04	53201	4938	-52801	5	T	p-	0.5687	1.0449	11N	60W	55	182	04m21s
-2269-Jun-27	06:33:10	53188	4935	-52795	10	A	p-	-0.6796	0.9415	20S	58W	47	295	07m51s
-2269-Nov-22	11:17:34	53178	4933	-52790	-23	P	-t	-1.4790	0.1178	70S	90E	0		
-2269-Dec-21	22:38:54	53176	4933	-52789	15	P	t-	1.2390	0.5584	67N	68E	0		
-2268-May-16	20:52:34	53165	4931	-52784	-18	P	-t	1.3195	0.4106	70N	46W	0		
-2268-Jun-15	08:33:59	53163	4931	-52783	20	P	t-	-1.4045	0.2641	68S	74W	0		
-2268-Nov-10	21:05:44	53153	4929	-52778	-13	A	-p	-0.8587	0.9532	67S	48E	30	334	03m32s
-2267-May-06	09:13:36	53140	4926	-52772	-8	T	-p	0.5020	1.0565	39N	109W	60	215	04m33s
-2267-Oct-30	23:32:58	53127	4924	-52766	-3	A	nn	-0.1893	0.9209	18S	43E	79	305	10m05s
-2266-Apr-26	02:00:31	53115	4922	-52760	2	T	n-	-0.2507	1.0816	8S	15E	75	271	07m09s
-2266-Oct-19	22:30:04	53102	4919	-52754	7	A	p-	0.4873	0.9220	25N	72E	61	335	09m30s
-2265-Apr-15	18:39:11	53089	4917	-52748	12	P	t-	-1.0094	0.9950	72S	154W	0		
-2265-Oct-09	01:35:47	53077	4915	-52742	17	P	t-	1.1455	0.7172	72N	111E	0		
-2264-Mar-05	18:03:08	53066	4913	-52737	-16	A	-t	0.9076	0.9568	50N	114E	24	374	04m03s
-2264-Aug-29	01:45:34	53054	4911	-52731	-11	T	-p	-0.9196	1.0410	49S	2W	23	352	03m06s
-2263-Feb-22	19:27:38	53041	4908	-52725	-6	A	nn	0.1792	0.9369	7S	112E	80	238	08m40s
-2263-Aug-18	18:06:03	53029	4906	-52719	-1	T	-n	-0.2259	1.0556	6N	128E	77	188	05m19s
-2262-Feb-11	20:07:22	53016	4904	-52713	4	A	p-	-0.5510	0.9508	53S	112E	56	217	04m40s
-2262-Aug-08	08:16:32	53003	4901	-52707	9	H	p-	0.5069	1.0130	52N	79W	59	52	01m04s
-2261-Jan-02	15:03:54	52993	4900	-52702	-24	P	-t	1.4855	0.1042	65N	164W	0		
-2261-Feb-01	02:41:22	52991	4899	-52701	14	P	t-	-1.2403	0.5539	68S	173E	0		
-2261-Jun-29	01:42:43	52980	4897	-52696	-19	Pe	-t	-1.5477	0.0238	64S	41E	0		
-2261-Jul-28	16:14:49	52978	4897	-52695	19	P	t-	1.2996	0.4490	67N	25W	0		
-2261-Dec-23	06:00:56	52968	4895	-52690	-14	T	-p	0.7805	1.0433	27N	38W	38	230	03m48s
-2260-Jun-17	02:11:16	52955	4893	-52684	-9	A	-p	-0.8117	0.9446	31S	20E	36	344	06m29s
-2260-Dec-11	21:31:37	52942	4890	-52678	-4	T	-n	0.1130	1.0295	15S	79E	84	101	02m47s
-2259-Jun-06	05:49:14	52930	4888	-52672	1	A	nn	-0.0211	0.9910	18N	49W	89	32	00m58s
-2259-Dec-01	08:55:26	52917	4886	-52666	6	A	p-	-0.6011	0.9721	52S	115W	53	124	02m17s
-2258-May-26	16:41:45	52905	4883	-52660	11	T	p-	0.7435	1.0419	58N	114E	42	208	02m48s

-2258-Nov-20	13:03:00	52892	4881	-52654	16	P	t-	-1.3361	0.3904	62S	83E	0			
-2257-Apr-17	02:26:28	52881	4879	-52649	-17	P	-t	-1.0387	0.9498	61S	90E	0			
-2257-May-16	08:54:41	52879	4879	-52648	21	P	t-	1.4467	0.1569	61N	149E	0			
-2257-Oct-10	17:19:28	52869	4877	-52643	-12	P	-t	1.0393	0.8894	60N	129W	0			
-2256-Apr-05	18:11:30	52856	4875	-52637	-7	T	-p	-0.3135	1.0385	17S	139E	72	135	03m18s	
-2256-Sep-28	22:34:37	52844	4872	-52631	-2	A	-n	0.3001	0.9856	20N	71E	72	53	01m21s	
-2255-Mar-26	04:08:19	52831	4870	-52625	3	A	p-	0.4709	0.9796	19N	33W	62	81	02m03s	
-2255-Sep-18	10:57:24	52819	4868	-52619	8	T	n-	-0.4064	1.0378	12S	135W	66	138	03m16s	
-2254-Mar-15	06:54:30	52806	4865	-52613	13	P	t-	1.2541	0.5280	61N	131W	0			
-2254-Sep-08	02:53:28	52793	4863	-52607	18	P	t-	-1.0772	0.8666	61S	67W	0			
-2253-Feb-02	16:18:55	52783	4861	-52602	-15	A	-p	-0.9125	0.9541	75S	122W	24	415	03m02s	
-2253-Jul-30	06:30:22	52770	4859	-52596	-10	A	-t	0.8790	0.9930	78N	5E	28	52	00m27s	
-2252-Jan-23	00:52:14	52758	4857	-52590	-5	H	nn	-0.1480	1.0152	32S	33E	81	53	01m26s	
-2252-Jul-18	12:29:20	52745	4854	-52584	0	A	nn	0.1465	0.9550	32N	147W	81	166	05m12s	
-2251-Jan-11	15:17:10	52733	4852	-52578	5	T	p-	0.5522	1.0491	9N	169E	56	195	04m43s	
-2251-Jul-07	13:05:33	52720	4850	-52572	10	A	p-	-0.6040	0.9407	13S	161W	53	276	08m14s	
-2251-Dec-02	20:01:26	52710	4848	-52567	-23	P	-t	-1.4822	0.1127	69S	55W	0			
-2250-Jan-01	07:16:54	52707	4847	-52566	15	P	t-	1.2315	0.5727	66N	74W	0			
-2250-May-28	03:43:05	52697	4846	-52561	-18	P	-t	1.3923	0.2783	70N	163W	0			
-2250-Jun-26	15:19:26	52695	4845	-52560	20	P	t-	-1.3267	0.4008	67S	171E	0			
-2250-Nov-22	05:29:32	52684	4843	-52555	-13	A	-p	-0.8598	0.9507	72S	81W	30	356	03m38s	
-2249-May-17	16:27:52	52672	4841	-52549	-8	T	-p	0.5764	1.0585	48N	138E	55	235	04m25s	
-2249-Nov-11	07:35:58	52659	4839	-52543	-3	A	nn	-0.1912	0.9195	23S	79W	79	311	10m13s	
-2248-May-06	09:24:58	52647	4836	-52537	2	T	n-	-0.1770	1.0823	0N	100W	80	269	07m20s	
-2248-Oct-30	06:32:23	52634	4834	-52531	7	A	p-	0.4829	0.9226	20N	52W	61	331	09m45s	
-2247-Apr-26	01:55:42	52622	4832	-52525	12	T	t-	-0.9404	1.0412	59S	44E	19	409	02m49s	
-2247-Oct-19	09:57:18	52609	4829	-52519	17	P	t-	1.1388	0.7293	72N	31W	0			
-2246-Mar-17	00:59:21	52598	4828	-52514	-16	A	-t	0.9744	0.9538	63N	9W	12	783	03m44s	
-2246-Sep-09	10:08:42	52586	4825	-52508	-11	T	-p	-0.9410	1.0383	55S	137W	19	383	02m43s	
-2245-Mar-06	02:15:54	52573	4823	-52502	-6	A	nn	0.2414	0.9395	0N	6E	76	231	08m10s	
-2245-Aug-30	02:20:31	52561	4821	-52496	-1	T	-n	-0.2558	1.0506	2N	2E	75	173	04m50s	
-2244-Feb-23	03:17:18	52548	4818	-52490	4	A	p-	-0.4985	0.9569	46S	3E	60	181	04m16s	
-2244-Aug-18	16:05:16	52536	4816	-52484	9	H	p-	0.4702	1.0067	47N	165E	62	26	00m35s	

-2243-Jan-12	23:25:32	52525	4814	-52479	-24	P	-t	1.4984	0.0780	66N	58E	0		
-2243-Feb-11	10:28:32	52523	4814	-52478	14	P	t-	-1.1998	0.6278	69S	43E	0		
-2243-Aug-07	23:26:41	52511	4812	-52472	19	P	t-	1.2527	0.5303	68N	146W	0		
-2242-Jan-02	14:40:15	52500	4810	-52467	-14	T	-p	0.7916	1.0458	28N	172W	37	250	04m03s
-2242-Jun-28	08:40:43	52488	4807	-52461	-9	A	-p	-0.8895	0.9421	39S	80W	27	467	06m29s
-2242-Dec-23	06:11:31	52475	4805	-52455	-4	T	-n	0.1196	1.0293	16S	52W	83	100	02m50s
-2241-Jun-17	12:37:55	52463	4803	-52449	1	A	nn	-0.0998	0.9928	16N	152W	84	25	00m47s
-2241-Dec-12	17:20:38	52450	4801	-52443	6	A	p-	-0.5999	0.9706	56S	120E	53	132	02m24s
-2240-Jun-05	23:55:12	52438	4798	-52437	11	T	p-	0.6665	1.0455	57N	12E	48	203	03m08s
-2240-Nov-30	21:08:07	52425	4796	-52431	16	P	t-	-1.3348	0.3926	62S	49W	0		
-2239-Apr-27	09:51:36	52415	4794	-52426	-17	P	-t	-1.1118	0.8080	61S	32W	0		
-2239-May-26	16:18:24	52412	4794	-52425	21	P	t-	1.3739	0.2986	62N	27E	0		
-2239-Oct-21	01:24:28	52402	4792	-52420	-12	P	-t	1.0431	0.8831	60N	99E	0		
-2238-Apr-17	01:24:31	52389	4789	-52414	-7	T	-p	-0.3879	1.0362	17S	29E	67	131	03m09s
-2238-Oct-10	06:58:08	52377	4787	-52408	-2	A	-n	0.3071	0.9867	16N	58W	72	49	01m15s
-2237-Apr-06	10:57:57	52364	4785	-52402	3	A	p-	0.3975	0.9790	19N	136W	66	81	02m06s
-2237-Sep-29	19:32:32	52352	4783	-52396	8	T	n-	-0.3933	1.0373	15S	94E	67	135	03m08s
-2236-Mar-25	13:28:57	52339	4780	-52390	13	P	t-	1.1819	0.6512	61N	119E	0		
-2236-Sep-18	11:24:13	52327	4778	-52384	18	P	t-	-1.0602	0.8976	61S	155E	0		
-2235-Feb-12	23:45:33	52316	4776	-52379	-15	A	-p	-0.9520	0.9585	71S	139E	17	504	02m38s
-2235-Aug-09	14:03:07	52304	4774	-52373	-10	A	-t	0.9282	0.9847	74N	86W	21	148	00m56s
-2234-Feb-02	08:53:21	52291	4772	-52367	-5	T	nn	-0.1788	1.0215	32S	88W	80	75	01m57s
-2234-Jul-29	19:26:57	52279	4769	-52361	0	A	nn	0.2066	0.9497	35N	109E	78	189	05m38s
-2233-Jan-22	23:40:00	52266	4767	-52355	5	T	p-	0.5278	1.0536	8N	40E	58	208	05m03s
-2233-Jul-18	19:46:17	52254	4765	-52349	10	A	p-	-0.5348	0.9393	8S	96E	58	266	08m28s
-2233-Dec-14	04:40:32	52243	4763	-52344	-23	P	-t	-1.4889	0.1009	68S	162E	0		
-2232-Jan-12	15:46:06	52241	4763	-52343	15	P	t-	1.2173	0.5996	65N	146E	0		
-2232-Jun-07	10:37:53	52231	4761	-52338	-18	P	-t	1.4622	0.1506	69N	79E	0		
-2232-Jul-06	22:13:26	52229	4760	-52337	20	P	t-	-1.2546	0.5277	66S	55E	0		
-2232-Dec-02	13:49:56	52218	4758	-52332	-13	A	-p	-0.8631	0.9488	76S	154E	30	376	03m41s
-2231-May-27	23:44:21	52206	4756	-52326	-8	T	-p	0.6497	1.0596	56N	25E	49	258	04m11s
-2231-Nov-21	15:39:42	52193	4754	-52320	-3	A	nn	-0.1924	0.9188	27S	158E	79	314	10m16s
-2230-May-17	16:46:44	52181	4752	-52314	2	T	nn	-0.1011	1.0821	8N	145E	84	266	07m21s

-2230-Nov-10	14:39:08	52168	4749	-52308	7	A	p-	0.4818	0.9237	16N	177W	61	326	09m55s
-2229-May-07	09:07:14	52156	4747	-52302	12	T	p-	-0.8678	1.0416	47S	80W	29	278	03m14s
-2229-Oct-30	18:24:04	52143	4745	-52296	17	P	t-	1.1356	0.7353	71N	174W	0		
-2228-Mar-27	07:46:45	52133	4743	-52291	-16	P	-t	1.0472	0.8877	72N	151W	0		
-2228-Sep-19	18:40:16	52120	4741	-52285	-11	T	-p	-0.9559	1.0358	60S	84E	16	417	02m24s
-2227-Mar-16	08:57:39	52108	4738	-52279	-6	A	np	0.3088	0.9420	8N	98W	72	225	07m36s
-2227-Sep-09	10:41:09	52095	4736	-52273	-1	T	-n	-0.2801	1.0457	3S	126W	74	158	04m20s
-2226-Mar-05	10:22:03	52083	4734	-52267	4	A	p-	-0.4409	0.9630	39S	106W	64	149	03m49s
-2226-Aug-30	00:00:31	52070	4732	-52261	9	H	n-	0.4401	1.0005	42N	45E	64	2	00m03s
-2225-Jan-24	07:39:48	52060	4730	-52256	-24	Pe	-t	1.5180	0.0391	67N	78W	0		
-2225-Feb-22	18:08:00	52058	4729	-52255	14	P	t-	-1.1522	0.7156	70S	86W	0		
-2225-Aug-19	06:46:45	52045	4727	-52249	19	P	t-	1.2130	0.5983	69N	90E	0		
-2224-Jan-13	23:11:31	52035	4725	-52244	-14	T	-p	0.8094	1.0484	30N	55E	36	274	04m14s
-2224-Jul-08	15:18:55	52022	4723	-52238	-9	A	-t	-0.9606	0.9385	50S	176E	16	840	06m16s
-2223-Jan-02	14:43:18	52010	4721	-52232	-4	T	-n	0.1323	1.0293	16S	179E	82	100	02m54s
-2223-Jun-27	19:35:15	51998	4718	-52226	1	Am	nn	-0.1721	0.9942	14N	103E	80	21	00m40s
-2223-Dec-23	01:38:54	51985	4716	-52220	6	A	p-	-0.5941	0.9696	58S	2W	53	136	02m30s
-2222-Jun-17	07:12:33	51973	4714	-52214	11	T	p-	0.5920	1.0481	56N	92W	53	198	03m25s
-2222-Dec-12	05:08:44	51960	4712	-52208	16	P	t-	-1.3305	0.3998	63S	179E	0		
-2221-May-08	17:12:59	51950	4710	-52203	-17	P	-t	-1.1873	0.6613	61S	153W	0		
-2221-Jun-06	23:43:19	51948	4709	-52202	21	P	t-	1.3021	0.4383	63N	95W	0		
-2221-Nov-01	09:34:17	51937	4707	-52197	-12	P	-t	1.0435	0.8829	61N	34W	0		
-2220-Apr-27	08:31:38	51925	4705	-52191	-7	T	-p	-0.4662	1.0330	18S	78W	62	124	02m55s
-2220-Oct-20	15:28:52	51912	4703	-52185	-2	A	-n	0.3086	0.9882	12N	172E	72	43	01m07s
-2219-Apr-16	17:40:20	51900	4701	-52179	3	A	nn	0.3190	0.9779	19N	122E	71	82	02m12s
-2219-Oct-10	04:14:15	51887	4698	-52173	8	T	n-	-0.3854	1.0371	19S	40W	67	134	03m03s
-2218-Apr-05	19:56:21	51875	4696	-52167	13	P	t-	1.1039	0.7847	60N	12E	0		
-2218-Sep-29	20:01:49	51862	4694	-52161	18	P	t-	-1.0491	0.9171	61S	15E	0		
-2217-Feb-24	07:04:08	51852	4692	-52156	-15	A-	-t	-0.9987	0.9776	62S	58E	0		
-2217-Aug-20	21:43:11	51839	4690	-52150	-10	A	-t	0.9703	0.9759	69N	173E	13	370	01m25s
-2216-Feb-13	16:47:30	51827	4687	-52144	-5	T	-n	-0.2163	1.0278	31S	154E	77	97	02m26s
-2216-Aug-09	02:31:58	51814	4685	-52138	0	A	nn	0.2597	0.9445	36N	4E	75	212	06m03s
-2215-Feb-02	07:56:21	51802	4683	-52132	5	T	p-	0.4979	1.0580	7N	87W	60	219	05m20s

-2215-Jul-29	02:36:02	51790	4681	-52126	10	A	p-	-0.4725	0.9378	5S	9W	62	261	08m32s
-2215-Dec-24	13:14:36	51779	4679	-52121	-23	P	-t	-1.4992	0.0826	67S	20E	0		
-2214-Jan-23	00:08:16	51777	4678	-52120	15	P	t-	1.1980	0.6359	64N	9E	0		
-2214-Jun-18	17:37:43	51767	4677	-52115	-18	Pe	-t	1.5287	0.0287	68N	39W	0		
-2214-Jul-18	05:15:32	51765	4676	-52114	20	P	t-	-1.1877	0.6455	65S	63W	0		
-2214-Dec-13	22:05:41	51754	4674	-52109	-13	A	-p	-0.8693	0.9474	81S	34E	29	396	03m42s
-2213-Jun-08	07:04:24	51742	4672	-52103	-8	T	-p	0.7207	1.0597	65N	88W	44	284	03m55s
-2213-Dec-02	23:39:11	51729	4670	-52097	-3	A	nn	-0.1967	0.9189	30S	37E	78	314	10m11s
-2212-May-28	00:10:44	51717	4667	-52091	2	Tm	nn	-0.0272	1.0809	16N	30E	89	261	07m13s
-2212-Nov-20	22:45:34	51704	4665	-52085	7	A	p-	0.4795	0.9256	12N	58E	61	318	09m57s
-2211-May-17	16:17:43	51692	4663	-52079	12	T	p-	-0.7950	1.0403	37S	163E	37	221	03m27s
-2211-Nov-10	02:53:09	51680	4661	-52073	17	P	t-	1.1335	0.7396	71N	44E	0		
-2210-Apr-07	14:26:03	51669	4659	-52068	-16	P	-t	1.1255	0.7515	72N	93E	0		
-2210-Oct-01	03:19:14	51657	4657	-52062	-11	T	-p	-0.9649	1.0338	64S	58W	15	445	02m08s
-2209-Mar-27	15:28:57	51644	4654	-52056	-6	A	-p	0.3846	0.9441	16N	159E	67	222	07m00s
-2209-Sep-20	19:10:36	51632	4652	-52050	-1	T	-n	-0.2965	1.0410	8S	103E	73	143	03m50s
-2208-Mar-15	17:18:21	51619	4650	-52044	4	A	p-	-0.3755	0.9690	31S	147E	68	120	03m19s
-2208-Sep-09	08:03:39	51607	4648	-52038	9	A	n-	0.4174	0.9944	36N	77W	65	22	00m31s
-2207-Mar-05	01:40:23	51595	4645	-52032	14	P	t-	-1.0978	0.8169	70S	146E	0		
-2207-Aug-29	14:14:57	51582	4643	-52026	19	P	t-	1.1804	0.6533	70N	36W	0		
-2206-Jan-24	07:35:53	51572	4641	-52021	-14	T	-p	0.8331	1.0509	34N	77W	33	306	04m21s
-2206-Jul-19	22:03:57	51559	4639	-52015	-9	P	-t	-1.0262	0.9171	66S	70E	0		
-2205-Jan-13	23:08:29	51547	4637	-52009	-4	T	-n	0.1500	1.0296	15S	51E	81	101	02m59s
-2205-Jul-09	02:39:31	51534	4635	-52003	1	A	nn	-0.2396	0.9950	10N	5W	76	18	00m35s
-2204-Jan-03	09:49:31	51522	4632	-51997	6	A	p-	-0.5829	0.9691	59S	120W	54	137	02m35s
-2204-Jun-27	14:36:24	51510	4630	-51991	11	T	p-	0.5223	1.0499	54N	163E	58	194	03m40s
-2204-Dec-22	13:04:11	51497	4628	-51985	16	P	t-	-1.3228	0.4125	64S	49E	0		
-2203-May-19	00:34:06	51487	4626	-51980	-17	P	-t	-1.2627	0.5151	62S	86E	0		
-2203-Jun-17	07:11:32	51485	4626	-51979	21	P	t-	1.2330	0.5725	63N	142E	0		
-2203-Nov-11	17:46:23	51474	4624	-51974	-12	P	-t	1.0426	0.8852	61N	168W	0		
-2202-May-08	15:35:45	51462	4621	-51968	-7	T	-p	-0.5458	1.0291	19S	174E	57	116	02m38s
-2202-Nov-01	00:03:02	51450	4619	-51962	-2	A	-n	0.3083	0.9904	8N	40E	72	35	00m56s
-2201-Apr-28	00:16:45	51437	4617	-51956	3	A	nn	0.2362	0.9763	19N	23E	76	87	02m24s

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°	°	ALT	WIDTH	DUR.
	GREATEST		S									°	km	
	ECLIPSE													
-2199-Mar-06	14:15:51	51390	4608	-51933	-15	P	-t	-1.0518	0.8868	61S	61W	0		
-2199-Aug-31	05:31:05	51377	4606	-51927	-10	A+	-t	1.0050	0.9696	62N	73E	0		
-2198-Feb-24	00:33:16	51365	4604	-51921	-5	T	-n	-0.2615	1.0340	30S	38E	75	119	02m53s
-2198-Aug-20	09:45:31	51352	4602	-51915	0	A	-p	0.3053	0.9393	35N	104W	72	236	06m29s
-2197-Feb-13	16:03:09	51340	4599	-51909	5	T	p-	0.4598	1.0625	7N	149E	63	229	05m34s
-2197-Aug-09	09:36:20	51327	4597	-51903	10	A	p-	-0.4183	0.9360	2S	117W	65	260	08m32s
-2196-Jan-04	21:40:00	51317	4595	-51898	-23	P	-t	-1.5160	0.0521	66S	119W	0		
-2196-Feb-03	08:19:45	51315	4595	-51897	15	P	t-	1.1706	0.6878	63N	126W	0		
-2196-Jul-28	12:28:55	51303	4593	-51891	20	P	t-	-1.1288	0.7495	64S	177E	0		
-2196-Dec-24	06:15:31	51292	4591	-51886	-13	A	-p	-0.8800	0.9464	85S	66W	28	421	03m41s

-2195-Jun-18	14:28:04	51280	4589	-51880	-8	T	-p	0.7891	1.0589	74N	161E	38	318	03m36s
-2195-Dec-13	07:36:02	51268	4586	-51874	-3	A	nn	-0.2030	0.9196	33S	82W	78	311	10m00s
-2194-Jun-08	07:35:04	51255	4584	-51868	2	T	nn	0.0465	1.0789	23N	83W	87	255	06m56s
-2194-Dec-02	06:52:03	51243	4582	-51862	7	A	p-	0.4770	0.9282	9N	66W	61	306	09m49s
-2193-May-28	23:25:50	51230	4580	-51856	12	T	p-	-0.7211	1.0379	28S	49E	44	183	03m32s
-2193-Nov-21	11:24:15	51218	4577	-51850	17	P	t-	1.1324	0.7425	70N	99W	0		
-2192-Apr-17	20:59:13	51208	4576	-51845	-16	P	-t	1.2073	0.6091	72N	21W	0		
-2192-Oct-11	12:03:19	51195	4573	-51839	-11	T	-p	-0.9699	1.0323	68S	159E	13	465	01m57s
-2191-Apr-06	21:56:30	51183	4571	-51833	-6	A	-p	0.4632	0.9460	25N	57E	62	223	06m24s
-2191-Oct-01	03:45:28	51170	4569	-51827	-1	T	-n	-0.3080	1.0365	13S	29W	72	129	03m23s
-2190-Mar-27	00:09:47	51158	4567	-51821	4	A	p-	-0.3052	0.9748	22S	39E	72	94	02m47s
-2190-Sep-20	16:12:53	51146	4564	-51815	9	A	n-	0.4006	0.9885	31N	158E	66	44	01m07s
-2189-Mar-16	09:06:44	51133	4562	-51809	14	P	t-	-1.0375	0.9305	71S	19E	0		
-2189-Sep-09	21:51:13	51121	4560	-51803	19	P	t-	1.1549	0.6957	71N	165W	0		
-2188-Feb-04	15:50:45	51111	4558	-51798	-14	T	-p	0.8647	1.0530	39N	153E	30	350	04m20s
-2188-Jul-30	05:00:31	51098	4556	-51792	-9	P	-t	-1.0826	0.8203	67S	47W	0		
-2187-Jan-24	07:24:15	51086	4554	-51786	-4	T	-n	0.1747	1.0299	13S	75W	80	103	03m03s
-2187-Jul-19	09:53:12	51074	4551	-51780	1	A	-n	-0.3000	0.9955	6N	116W	73	17	00m32s
-2186-Jan-13	17:50:58	51061	4549	-51774	6	A	p-	-0.5652	0.9690	58S	125E	55	136	02m39s
-2186-Jul-08	22:07:03	51049	4547	-51768	11	T	p-	0.4579	1.0508	51N	54E	63	190	03m52s
-2185-Jan-02	20:50:30	51036	4545	-51762	16	P	t-	-1.3080	0.4371	65S	79W	0		
-2185-May-30	07:54:16	51026	4543	-51757	-17	P	-t	-1.3383	0.3688	62S	35W	0		
-2185-Jun-28	14:43:59	51024	4542	-51756	21	P	t-	1.1674	0.6995	64N	17E	0		
-2185-Nov-23	01:59:44	51014	4541	-51751	-12	P	-t	1.0412	0.8885	62N	58E	0		
-2184-May-18	22:37:09	51001	4538	-51745	-7	T	-p	-0.6268	1.0243	21S	67E	51	104	02m16s
-2184-Nov-11	08:40:03	50989	4536	-51739	-2	A	-n	0.3064	0.9931	4N	92W	72	25	00m41s
-2183-May-08	06:49:17	50977	4534	-51733	3	A	nn	0.1512	0.9742	19N	76W	81	93	02m41s
-2183-Oct-31	21:51:54	50964	4532	-51727	8	T	n-	-0.3805	1.0377	28S	51E	67	136	02m59s
-2182-Apr-27	08:35:17	50952	4529	-51721	13	A	t-	0.9338	0.9399	59N	158W	21	616	04m36s
-2182-Oct-21	13:31:56	50939	4527	-51715	18	P	t-	-1.0404	0.9311	61S	91E	0		
-2181-Mar-17	21:21:16	50929	4525	-51710	-15	P	-t	-1.1106	0.7846	61S	178W	0		
-2181-Sep-11	13:26:27	50917	4523	-51704	-10	P	-t	1.0327	0.9181	61N	56W	0		
-2180-Mar-06	08:12:43	50904	4521	-51698	-5	T	-n	-0.3129	1.0400	29S	77W	72	140	03m18s

-2180-Aug-30	17:07:49	50892	4519	-51692	0	A	-p	0.3430	0.9345	34N	146E	70	259	06m56s
-2179-Feb-24	00:03:44	50880	4517	-51686	5	T	n-	0.4163	1.0668	7N	26E	65	238	05m46s
-2179-Aug-19	16:45:35	50867	4514	-51680	10	A	p-	-0.3710	0.9344	2S	134E	68	262	08m26s
-2178-Jan-15	05:58:22	50857	4512	-51675	-23	Pe	-t	-1.5380	0.0121	65S	104E	0		
-2178-Feb-13	16:23:42	50855	4512	-51674	15	P	t-	1.1376	0.7502	62N	102E	0		
-2178-Aug-08	19:52:09	50843	4510	-51668	20	P	t-	-1.0765	0.8415	63S	55E	0		
-2177-Jan-04	14:15:59	50832	4508	-51663	-13	A	-p	-0.8973	0.9457	86S	118W	26	461	03m39s
-2177-Jun-29	21:57:45	50820	4506	-51657	-8	T	-p	0.8530	1.0571	82N	60E	31	365	03m16s
-2177-Dec-24	15:25:27	50808	4504	-51651	-3	A	nn	-0.2154	0.9209	36S	161E	77	307	09m40s
-2176-Jun-18	15:03:41	50795	4501	-51645	2	T	nn	0.1161	1.0761	29N	162E	83	248	06m33s
-2176-Dec-12	14:53:52	50783	4499	-51639	7	A	p-	0.4699	0.9315	7N	170E	62	290	09m29s
-2175-Jun-08	06:35:32	50771	4497	-51633	12	T	p-	-0.6492	1.0345	20S	65W	49	152	03m26s
-2175-Dec-01	19:54:02	50758	4495	-51627	17	P	t-	1.1294	0.7488	69N	119E	0		
-2174-Apr-29	03:25:20	50748	4493	-51622	-16	P	-t	1.2936	0.4593	71N	133W	0		
-2174-May-28	16:18:46	50746	4493	-51621	22	Pb	t-	-1.4759	0.1352	69S	179E	0		
-2174-Oct-22	20:52:53	50736	4491	-51616	-11	T	-p	-0.9708	1.0314	70S	14E	13	463	01m50s
-2173-Apr-18	04:17:02	50723	4488	-51610	-6	A	-p	0.5478	0.9474	35N	44W	57	229	05m48s
-2173-Oct-12	12:26:33	50711	4486	-51604	-1	T	-n	-0.3139	1.0326	18S	162W	72	115	02m59s
-2172-Apr-06	06:55:40	50699	4484	-51598	4	A	nn	-0.2291	0.9803	14S	67W	77	72	02m14s
-2172-Oct-01	00:29:28	50686	4482	-51592	9	A	n-	0.3907	0.9831	26N	31E	67	65	01m42s
-2171-Mar-26	16:27:42	50674	4480	-51586	14	T	t-	-0.9718	1.0206	71S	148W	13	312	01m15s
-2171-Sep-20	05:34:35	50662	4477	-51580	19	P	t-	1.1356	0.7272	71N	64E	0		
-2170-Feb-14	23:58:28	50652	4476	-51575	-14	T	-t	0.9021	1.0547	45N	24E	25	420	04m12s
-2170-Aug-10	12:06:10	50639	4473	-51569	-9	P	-t	-1.1318	0.7359	68S	167W	0		
-2169-Feb-04	15:30:34	50627	4471	-51563	-4	T	-n	0.2066	1.0302	9S	162E	78	104	03m07s
-2169-Jul-30	17:16:15	50615	4469	-51557	1	A	-n	-0.3535	0.9956	2N	131E	69	17	00m31s
-2168-Jan-25	01:43:13	50602	4467	-51551	6	A	p-	-0.5410	0.9692	56S	11E	57	132	02m43s
-2168-Jul-19	05:45:16	50590	4465	-51545	11	T	p-	0.3993	1.0512	48N	58W	66	185	04m02s
-2167-Jan-13	04:29:10	50578	4462	-51539	16	P	t-	-1.2875	0.4713	66S	154E	0		
-2167-Jun-09	15:16:57	50567	4460	-51534	-17	P	-t	-1.4113	0.2285	63S	157W	0		
-2167-Jul-08	22:22:07	50565	4460	-51533	21	P	t-	1.1067	0.8161	65N	109W	0		
-2167-Dec-03	10:12:07	50555	4458	-51528	-12	P	-t	1.0413	0.8897	62N	76W	0		
-2166-May-30	05:36:59	50543	4456	-51522	-7	T	-p	-0.7079	1.0187	24S	39W	45	89	01m47s

-2166-Nov-22	17:17:37	50530	4454	-51516	-2	A	-n	0.3047	0.9964	0N	136E	72	13	00m22s
-2165-May-19	13:19:32	50518	4452	-51510	3	Am	nn	0.0653	0.9714	18N	173W	86	103	03m05s
-2165-Nov-12	06:43:28	50506	4449	-51504	8	T	n-	-0.3803	1.0388	32S	84W	67	140	03m02s
-2164-May-07	14:51:05	50493	4447	-51498	13	A	p-	0.8455	0.9429	57N	121E	32	388	04m37s
-2164-Oct-31	22:22:16	50481	4445	-51492	18	P	t-	-1.0414	0.9283	61S	52W	0		
-2163-Mar-28	04:21:48	50471	4443	-51487	-15	P	-t	-1.1741	0.6727	61S	66E	0		
-2163-Sep-21	21:28:18	50459	4441	-51481	-10	P	-t	1.0541	0.8782	61N	173E	0		
-2162-Mar-17	15:45:20	50446	4439	-51475	-5	T	-n	-0.3706	1.0455	28S	169E	68	162	03m41s
-2162-Sep-11	00:39:16	50434	4437	-51469	0	A	-p	0.3727	0.9300	31N	32E	68	281	07m24s
-2161-Mar-07	07:54:07	50422	4434	-51463	5	T	n-	0.3641	1.0707	7N	93W	69	245	05m55s
-2161-Aug-31	00:06:45	50409	4432	-51457	10	A	p-	-0.3329	0.9327	2S	22E	71	265	08m20s
-2160-Feb-25	00:17:02	50397	4430	-51451	15	P	t-	1.0965	0.8279	62N	27W	0		
-2160-Aug-19	03:26:07	50385	4428	-51445	20	P	t-	-1.0321	0.9198	62S	70W	0		
-2159-Jan-14	22:07:54	50375	4426	-51440	-13	A	-t	-0.9208	0.9450	82S	157E	23	531	03m36s
-2159-Jul-10	05:33:33	50362	4424	-51434	-8	T	-p	0.9123	1.0544	86N	36E	24	447	02m55s
-2158-Jan-03	23:09:06	50350	4422	-51428	-3	A	nn	-0.2321	0.9228	37S	45E	76	300	09m14s
-2158-Jun-29	22:34:17	50338	4419	-51422	2	T	-n	0.1836	1.0724	34N	49E	79	239	06m04s
-2158-Dec-23	22:52:57	50326	4417	-51416	7	A	p-	0.4600	0.9355	4N	47E	63	270	08m56s
-2157-Jun-19	13:46:17	50313	4415	-51410	12	T	p-	-0.5790	1.0303	13S	177W	55	126	03m10s
-2157-Dec-13	04:21:33	50301	4413	-51404	17	P	t-	1.1238	0.7598	68N	22W	0		
-2156-May-09	09:49:20	50291	4411	-51399	-16	P	-t	1.3803	0.3093	71N	116E	0		
-2156-Jun-07	22:57:52	50289	4411	-51398	22	P	t-	-1.4019	0.2675	69S	65E	0		
-2156-Nov-02	05:45:32	50278	4409	-51393	-11	T	-p	-0.9697	1.0312	73S	132W	13	452	01m45s
-2155-Apr-28	10:36:07	50266	4407	-51387	-6	A	-p	0.6334	0.9483	45N	145W	50	243	05m13s
-2155-Oct-22	21:10:40	50254	4404	-51381	-1	T	-n	-0.3167	1.0290	23S	64E	71	103	02m37s
-2154-Apr-17	13:39:49	50242	4402	-51375	4	A	nn	-0.1506	0.9854	5S	172W	81	52	01m40s
-2154-Oct-12	08:50:22	50229	4400	-51369	9	A	n-	0.3855	0.9781	21N	97W	67	84	02m17s
-2153-Apr-06	23:44:02	50217	4398	-51363	14	T	t-	-0.9014	1.0296	60S	70E	25	232	02m03s
-2153-Oct-01	13:25:11	50205	4396	-51357	19	P	t-	1.1229	0.7475	72N	70W	0		
-2152-Feb-26	07:57:10	50194	4394	-51352	-14	T	-t	0.9468	1.0552	54N	106W	18	574	03m54s
-2152-Aug-20	19:22:58	50182	4392	-51346	-9	P	-t	-1.1721	0.6669	69S	70E	0		
-2151-Feb-14	23:26:59	50170	4389	-51340	-4	T	-n	0.2459	1.0303	5S	40E	76	106	03m08s
-2151-Aug-10	00:50:23	50158	4387	-51334	1	A	-n	-0.3984	0.9955	2S	14E	67	17	00m31s

-2150-Feb-04	09:23:44	50145	4385	-51328	6	A	p-	-0.5080	0.9696	52S	102W	59	127	02m47s
-2150-Jul-30	13:31:52	50133	4383	-51322	11	T	n-	0.3472	1.0509	43N	173W	69	180	04m08s
-2149-Jan-24	11:57:03	50121	4381	-51316	16	P	t-	-1.2585	0.5198	67S	29E	0		
-2149-Jun-20	22:41:57	50111	4379	-51311	-17	Pe	-t	-1.4817	0.0944	64S	80E	0		
-2149-Jul-20	06:07:02	50109	4378	-51310	21	P	t-	1.0518	0.9208	66N	122E	0		
-2149-Dec-14	18:21:13	50098	4377	-51305	-12	P	-t	1.0445	0.8858	63N	151E	0		
-2148-Jun-09	12:37:44	50086	4374	-51299	-7	T	-p	-0.7868	1.0123	29S	147W	38	67	01m11s
-2148-Dec-03	01:55:14	50074	4372	-51293	-2	H	-n	0.3034	1.0002	3S	5E	72	1	00m02s
-2147-May-29	19:47:52	50062	4370	-51287	3	A	nn	-0.0213	0.9682	17N	89E	89	114	03m35s
-2147-Nov-22	15:36:46	50050	4368	-51281	8	T	n-	-0.3812	1.0403	37S	142E	67	146	03m08s
-2146-May-18	21:04:49	50037	4366	-51275	13	A	p-	0.7551	0.9449	56N	35E	41	305	04m39s
-2146-Nov-12	07:14:35	50025	4363	-51269	18	P	t-	-1.0441	0.9224	61S	164E	0		
-2145-Apr-08	11:17:18	50015	4362	-51264	-15	P	-t	-1.2425	0.5505	61S	49W	0		
-2145-May-07	23:06:28	50013	4361	-51263	23	Pb	t-	1.4864	0.1202	61N	69W	0		
-2145-Oct-03	05:36:48	50002	4359	-51258	-10	P	-t	1.0693	0.8496	60N	40E	0		
-2144-Mar-27	23:13:38	49990	4357	-51252	-5	T	-p	-0.4330	1.0504	27S	56E	64	184	04m02s
-2144-Sep-21	08:17:13	49978	4355	-51246	0	A	-p	0.3968	0.9260	28N	83W	66	300	07m54s
-2143-Mar-17	15:39:28	49966	4353	-51240	5	T	n-	0.3074	1.0741	7N	149E	72	251	06m03s
-2143-Sep-10	07:36:48	49954	4351	-51234	10	A	n-	-0.3015	0.9313	4S	93W	72	268	08m13s
-2142-Mar-07	08:01:44	49941	4349	-51228	15	P	t-	1.0488	0.9180	61N	154W	0		
-2142-Aug-30	11:10:24	49929	4346	-51222	20	As	t-	-0.9950	0.9630	59S	169E	4	-	02m49s
-2141-Jan-26	05:49:05	49919	4345	-51217	-13	A	-t	-0.9524	0.9440	76S	55E	17	698	03m33s
-2141-Jul-21	13:17:24	49907	4342	-51211	-8	T	-t	0.9653	1.0504	77N	37W	14	671	02m31s
-2140-Jan-15	06:42:13	49894	4340	-51205	-3	A	nn	-0.2577	0.9251	39S	67W	75	292	08m43s
-2140-Jul-10	06:12:00	49882	4338	-51199	2	T	-n	0.2450	1.0681	38N	65W	76	229	05m33s
-2139-Jan-03	06:45:28	49870	4336	-51193	7	A	p-	0.4435	0.9401	2N	74W	64	247	08m12s
-2139-Jun-29	21:00:01	49858	4334	-51187	12	T	p-	-0.5120	1.0254	7S	70E	59	100	02m45s
-2139-Dec-23	12:45:06	49846	4331	-51181	17	P	t-	1.1140	0.7787	67N	161W	0		
-2138-May-20	16:10:12	49835	4330	-51176	-16	P	-t	1.4685	0.1572	70N	6E	0		
-2138-Jun-19	05:37:45	49833	4329	-51175	22	P	t-	-1.3286	0.3975	68S	49W	0		
-2138-Nov-13	14:39:45	49823	4327	-51170	-11	T	-p	-0.9674	1.0316	76S	81E	14	441	01m44s
-2137-May-09	16:51:54	49811	4325	-51164	-6	A	-p	0.7218	0.9486	55N	113E	44	272	04m42s
-2137-Nov-03	05:58:30	49799	4323	-51158	-1	T	-n	-0.3162	1.0260	27S	70W	71	93	02m20s

-2136-Apr-27	20:21:57	49786	4321	-51152	4	A	nn	-0.0694	0.9900	3N	83E	86	35	01m08s
-2136-Oct-22	17:15:04	49774	4319	-51146	9	A	n-	0.3842	0.9736	17N	134E	67	102	02m52s
-2135-Apr-17	06:57:46	49762	4317	-51140	14	T	t-	-0.8277	1.0370	49S	53W	34	220	02m49s
-2135-Oct-11	21:21:48	49750	4314	-51134	19	P	t-	1.1154	0.7591	72N	155E	0		
-2134-Mar-08	15:47:51	49740	4313	-51129	-14	T+	-t	0.9982	1.0235	71N	102E	0		
-2134-Apr-06	22:56:55	49738	4312	-51128	24	Pb	t-	-1.5196	0.0159	71S	137E	0		
-2134-Sep-01	02:50:09	49727	4310	-51123	-9	P	-t	-1.2047	0.6113	70S	56W	0		
-2133-Feb-26	07:14:04	49715	4308	-51117	-4	T	-n	0.2924	1.0302	1N	80W	73	107	03m05s
-2133-Aug-21	08:34:41	49703	4306	-51111	1	A	-n	-0.4360	0.9954	7S	105W	64	18	00m31s
-2132-Feb-15	16:54:14	49691	4304	-51105	6	A	p-	-0.4675	0.9701	46S	145E	62	122	02m52s
-2132-Aug-09	21:27:51	49679	4302	-51099	11	T	n-	0.3024	1.0502	39N	68E	72	175	04m12s
-2131-Feb-03	19:16:49	49666	4300	-51093	16	P	t-	-1.2232	0.5792	68S	94W	0		
-2131-Jul-30	13:58:07	49654	4297	-51087	21	T+	t-	1.0023	1.0144	67N	8W	0		
-2131-Dec-25	02:26:39	49644	4296	-51082	-12	P	-t	1.0514	0.8758	64N	18E	0		
-2130-Jun-20	19:40:08	49632	4293	-51076	-7	H	-t	-0.8630	1.0050	36S	105E	30	34	00m28s
-2130-Dec-14	10:28:56	49620	4291	-51070	-2	H	-n	0.3062	1.0047	5S	126W	72	17	00m30s
-2129-Jun-10	02:17:42	49607	4289	-51064	3	A	nn	-0.1059	0.9645	15N	9W	84	129	04m13s
-2129-Dec-04	00:27:17	49595	4287	-51058	8	T	n-	-0.3799	1.0424	40S	9E	67	153	03m16s
-2128-May-29	03:21:07	49583	4285	-51052	13	A	p-	0.6662	0.9461	55N	52W	48	264	04m45s
-2128-Nov-22	16:05:01	49571	4283	-51046	18	P	t-	-1.0459	0.9184	62S	20E	0		
-2127-Apr-18	18:11:01	49561	4281	-51041	-15	P	-t	-1.3131	0.4230	61S	163W	0		
-2127-May-18	05:39:59	49559	4280	-51040	23	P	t-	1.3998	0.2718	61N	178W	0		
-2127-Oct-13	13:50:12	49548	4279	-51035	-10	P	-t	1.0798	0.8298	60N	94W	0		
-2126-Apr-08	06:35:38	49536	4276	-51029	-5	T	-p	-0.5013	1.0548	26S	55W	60	206	04m21s
-2126-Oct-02	16:03:41	49524	4274	-51023	0	A	-p	0.4134	0.9225	25N	158E	65	318	08m26s
-2125-Mar-28	23:16:28	49512	4272	-51017	5	T	n-	0.2438	1.0769	8N	33E	76	256	06m10s
-2125-Sep-21	15:17:40	49500	4270	-51011	10	A	n-	-0.2786	0.9302	6S	150E	74	270	08m06s
-2124-Mar-17	15:37:08	49487	4268	-51005	15	Tn	t-	0.9942	1.0312	59N	90E	5	-	01m56s
-2124-Sep-09	19:06:01	49475	4266	-50999	20	A	t-	-0.9664	0.9659	53S	55E	14	479	02m42s
-2123-Feb-05	13:20:46	49465	4264	-50994	-13	As	-t	-0.9910	0.9419	68S	42W	6	-	03m27s
-2123-Jul-31	21:08:00	49453	4262	-50988	-8	P	-t	1.0132	0.9916	64N	144W	0		
-2122-Jan-25	14:08:18	49441	4259	-50982	-3	A	-n	-0.2889	0.9277	39S	177W	73	284	08m09s
-2122-Jul-21	13:54:26	49429	4257	-50976	2	T	-n	0.3022	1.0632	41N	180W	72	217	05m01s

-2121-Jan-14	14:31:28	49417	4255	-50970	7	A	p-	0.4211	0.9453	1N	167E	65	222	07m18s
-2121-Jul-11	04:18:00	49404	4253	-50964	12	T	p-	-0.4493	1.0199	3S	42W	63	76	02m11s
-2120-Jan-03	21:03:56	49392	4251	-50958	17	P	t-	1.0995	0.8065	66N	62E	0		
-2120-May-30	22:32:08	49382	4249	-50953	-16	Pe	-t	1.5544	0.0099	69N	104W	0		
-2120-Jun-29	12:21:33	49380	4249	-50952	22	P	t-	-1.2589	0.5199	67S	162W	0		
-2120-Nov-23	23:33:07	49370	4247	-50947	-11	T	-p	-0.9662	1.0323	78S	70W	14	443	01m43s
-2119-May-19	23:09:53	49358	4245	-50941	-6	A	-p	0.8084	0.9482	66N	9E	36	324	04m15s
-2119-Nov-13	14:46:32	49346	4243	-50935	-1	T	-n	-0.3150	1.0235	31S	157E	71	84	02m05s
-2118-May-09	03:03:51	49333	4240	-50929	4	A	nn	0.0130	0.9940	12N	22W	89	21	00m40s
-2118-Nov-03	01:41:48	49321	4238	-50923	9	A	n-	0.3854	0.9698	13N	5E	67	117	03m24s
-2117-Apr-28	14:09:56	49309	4236	-50917	14	T	p-	-0.7516	1.0431	39S	171W	41	216	03m33s
-2117-Oct-23	05:22:14	49297	4234	-50911	19	P	t-	1.1114	0.7650	72N	19E	0		
-2116-Mar-18	23:30:53	49287	4232	-50906	-14	P	-t	1.0558	0.9132	71N	30W	0		
-2116-Apr-17	06:25:26	49285	4232	-50905	24	P	t-	-1.4522	0.1459	71S	10E	0		
-2116-Sep-11	10:28:46	49275	4230	-50900	-9	P	-t	-1.2286	0.5705	71S	175E	0		
-2115-Mar-08	14:51:27	49262	4228	-50894	-4	T	-p	0.3463	1.0296	8N	162E	70	107	02m59s
-2115-Aug-31	16:29:31	49250	4226	-50888	1	A	-p	-0.4656	0.9953	12S	133E	62	19	00m31s
-2114-Feb-26	00:13:17	49238	4224	-50882	6	A	p-	-0.4184	0.9706	40S	34E	65	116	02m58s
-2114-Aug-21	05:33:21	49226	4221	-50876	11	T	n-	0.2654	1.0491	34N	54W	74	169	04m12s
-2113-Feb-15	02:23:40	49214	4219	-50870	16	P	t-	-1.1777	0.6560	69S	146E	0		
-2113-Aug-10	21:57:44	49202	4217	-50864	21	T	t-	0.9602	1.0493	82N	174W	16	611	02m32s
-2112-Jan-05	10:26:24	49192	4215	-50859	-12	P	-t	1.0631	0.8574	65N	114W	0		
-2112-Jul-01	02:45:26	49179	4213	-50853	-7	A	-t	-0.9356	0.9967	45S	5W	20	33	00m18s
-2112-Dec-24	18:59:27	49167	4211	-50847	-2	H	-n	0.3123	1.0096	5S	104E	72	35	01m01s
-2111-Jun-20	08:49:03	49155	4209	-50841	3	A	nn	-0.1883	0.9604	12N	107W	79	146	04m58s
-2111-Dec-14	09:15:58	49143	4207	-50835	8	T	n-	-0.3766	1.0449	43S	123W	68	162	03m28s
-2110-Jun-09	09:38:03	49131	4205	-50829	13	A	p-	0.5773	0.9467	53N	141W	54	239	04m55s
-2110-Dec-04	00:54:47	49119	4202	-50823	18	P	t-	-1.0477	0.9148	63S	123W	0		
-2109-Apr-30	01:03:14	49109	4201	-50818	-15	P	-t	-1.3854	0.2911	61S	84E	0		
-2109-May-29	12:16:00	49107	4200	-50817	23	P	t-	1.3137	0.4235	62N	72E	0		
-2109-Oct-24	22:06:59	49096	4198	-50812	-10	P	-t	1.0867	0.8166	61N	131E	0		
-2108-Apr-18	13:56:15	49084	4196	-50806	-5	T	-p	-0.5715	1.0583	26S	166W	55	230	04m37s
-2108-Oct-12	23:55:40	49072	4194	-50800	0	A	-p	0.4249	0.9196	21N	38E	65	332	08m58s

-2107-Apr-08	06:49:45	49060	4192	-50794	5	T	n-	0.1768	1.0790	9N	81W	80	259	06m17s
-2107-Oct-01	23:05:58	49048	4190	-50788	10	A	n-	-0.2611	0.9295	10S	30E	75	272	07m59s
-2106-Mar-28	23:05:41	49036	4188	-50782	15	T	p-	0.9345	1.0356	52N	7W	20	331	02m23s
-2106-Sep-21	03:10:59	49024	4186	-50776	20	A	t-	-0.9442	0.9675	51S	69W	19	350	02m33s
-2105-Feb-16	20:39:58	49014	4184	-50771	-13	P	-t	-1.0390	0.8988	62S	153W	0		
-2105-Aug-12	05:08:24	49001	4182	-50765	-8	P	-t	1.0537	0.9135	63N	85E	0		
-2104-Feb-05	21:23:32	48989	4179	-50759	-3	A	-p	-0.3294	0.9306	39S	75E	71	275	07m34s
-2104-Jul-31	21:44:35	48977	4177	-50753	2	T	-n	0.3526	1.0580	43N	65E	69	204	04m30s
-2103-Jan-24	22:09:24	48965	4175	-50747	7	A	p-	0.3908	0.9508	0S	50E	67	195	06m19s
-2103-Jul-21	11:41:47	48953	4173	-50741	12	H	n-	-0.3920	1.0140	1N	156W	67	52	01m32s
-2102-Jan-14	05:15:39	48941	4171	-50735	17	P	t-	1.0783	0.8466	65N	73W	0		
-2102-Jul-10	19:09:13	48929	4169	-50729	22	P	t-	-1.1927	0.6350	66S	83E	0		
-2102-Dec-05	08:25:14	48919	4167	-50724	-11	T	-p	-0.9663	1.0335	80S	132E	14	461	01m45s
-2101-May-31	05:29:04	48907	4165	-50718	-6	A	-p	0.8944	0.9469	77N	109W	26	443	03m53s
-2101-Nov-24	23:33:57	48894	4163	-50712	-1	T	-n	-0.3140	1.0216	35S	24E	72	78	01m55s
-2100-May-19	09:47:50	48882	4161	-50706	4	A	nn	0.0950	0.9974	20N	127W	84	9	00m17s
-2100-Nov-13	10:10:19	48870	4158	-50700	9	A	n-	0.3886	0.9666	9N	125W	67	130	03m54s

21ST CENTURY BCE

In the 21st century BCE the total number of solar eclipses was 225 solar eclipses: 80 partial solar eclipses, 67 annular solar eclipses (64 central annular solar eclipses with two limits, 1 central annular solar eclipses with one limit, 2 non-central annular solar eclipses with one limit), 69 total solar eclipses (66 central total solar eclipses with two limits, 2 central total solar eclipses with one limit, 1 non-central total solar eclipses with one limit), 9 hybrid solar eclipses.

DATE	OF	s	SIGMA	NUM	NUM	TYPE		MAG	°	°	ALT	WIDTH	DUR.
	GREATEST		S								°	km	
	ECLIPSE												
-2099-May-08	21:21:04	48858	4156	-50694	14	T	p-	-0.6737	1.0484	30S	74E	47 216	04m16s
-2099-Nov-02	13:26:29	48846	4154	-50688	19	P	t-	1.1107	0.7654	71N	118W	0	
-2098-Mar-30	07:07:24	48836	4152	-50683	-14	P	-t	1.1188	0.7921	72N	159W	0	
-2098-Apr-28	13:50:20	48834	4152	-50682	24	P	t-	-1.3815	0.2830	71S	117W	0	
-2098-Sep-22	18:17:07	48824	4150	-50677	-9	P	-t	-1.2452	0.5424	71S	42E	0	
-2097-Mar-19	22:19:40	48812	4148	-50671	-4	T	-p	0.4069	1.0286	15N	45E	66 105	02m48s
-2097-Sep-12	00:34:32	48800	4146	-50665	1	A	-p	-0.4875	0.9953	17S	8E	61 19	00m30s
-2096-Mar-08	07:23:12	48787	4144	-50659	6	A	n-	-0.3629	0.9709	32S	77W	69 112	03m04s
-2096-Aug-31	13:46:40	48775	4142	-50653	11	T	n-	0.2346	1.0480	29N	179W	76 164	04m11s
-2095-Feb-25	09:22:49	48763	4140	-50647	16	P	t-	-1.1261	0.7437	70S	27E	0	
-2095-Aug-21	06:04:38	48751	4137	-50641	21	T	p-	0.9246	1.0469	80N	0E	22 418	02m35s
-2094-Jan-15	18:19:22	48741	4136	-50636	-12	P	-t	1.0814	0.8278	66N	116E	0	
-2094-Jul-12	09:54:51	48729	4134	-50630	-7	P	-t	-1.0037	0.9808	65S	114W	0	
-2093-Jan-05	03:23:32	48717	4131	-50624	-2	H	-n	0.3245	1.0150	5S	24W	71 54	01m36s
-2093-Jul-01	15:25:39	48705	4129	-50618	3	A	np	-0.2657	0.9559	8N	152E	75 167	05m48s
-2093-Dec-25	17:58:09	48693	4127	-50612	8	T	n-	-0.3680	1.0479	45S	108E	68 171	03m43s
-2092-Jun-19	16:01:53	48681	4125	-50606	13	A	p-	0.4935	0.9467	51N	128E	60 226	05m11s
-2092-Dec-14	09:40:04	48669	4123	-50600	18	P	t-	-1.0465	0.9169	63S	94E	0	
-2091-May-10	07:55:21	48659	4121	-50595	-15	P	-t	-1.4586	0.1566	61S	30W	0	
-2091-Jun-08	18:56:02	48657	4121	-50594	23	P	t-	1.2294	0.5727	63N	39W	0	
-2091-Nov-04	06:26:12	48647	4119	-50589	-10	P	-t	1.0909	0.8082	61N	4W	0	
-2090-Apr-29	21:13:32	48635	4117	-50583	-5	T	-p	-0.6449	1.0609	27S	84E	50 257	04m51s
-2090-Oct-24	07:53:19	48622	4115	-50577	0	A	-p	0.4318	0.9175	17N	84W	64 342	09m31s
-2089-Apr-19	14:16:42	48610	4113	-50571	5	T	nn	0.1045	1.0802	9N	166E	84 260	06m23s
-2089-Oct-13	07:03:28	48598	4110	-50565	10	A	n-	-0.2505	0.9294	14S	92W	75 272	07m51s
-2088-Apr-08	06:26:53	48586	4108	-50559	15	T	p-	0.8692	1.0370	49N	114W	29 246	02m33s
-2088-Oct-01	11:24:30	48574	4106	-50553	20	A	t-	-0.9281	0.9688	52S	164E	21 295	02m23s
-2087-Feb-27	03:49:55	48564	4104	-50548	-13	P	-t	-1.0938	0.8047	61S	89E	0	
-2087-Aug-22	13:16:49	48552	4102	-50542	-8	P	-t	1.0881	0.8472	62N	48W	0	
-2086-Feb-16	04:29:35	48540	4100	-50536	-3	A	-p	-0.3774	0.9336	39S	30W	68 266	07m00s

-2086-Aug-12	05:41:15	48528	4098	-50530	2	T	-n	0.3971	1.0524	43N	53W	66	189	04m01s
-2085-Feb-05	05:40:08	48516	4096	-50524	7	A	p-	0.3539	0.9568	1S	64W	69	168	05m19s
-2085-Aug-01	19:11:54	48504	4094	-50518	12	H	n-	-0.3409	1.0077	3N	89E	70	28	00m50s
-2084-Jan-25	13:20:56	48492	4092	-50512	17	P	t-	1.0509	0.8985	64N	154E	0		
-2084-Jul-21	02:03:56	48480	4090	-50506	22	P	t-	-1.1324	0.7386	65S	33W	0		
-2084-Dec-15	17:14:04	48470	4088	-50501	-11	T	-t	-0.9696	1.0348	81S	32W	13	507	01m46s
-2083-Jun-10	11:52:04	48458	4086	-50495	-6	A	-t	0.9774	0.9437	79N	58E	11	1061	03m32s
-2083-Dec-05	08:18:55	48445	4084	-50489	-1	T	-n	-0.3146	1.0202	38S	107W	71	73	01m46s
-2082-May-30	16:34:53	48433	4081	-50483	4	Hm	nn	0.1757	1.0003	28N	128E	80	1	00m02s
-2082-Nov-24	18:36:17	48421	4079	-50477	9	A	n-	0.3905	0.9641	6N	105E	67	141	04m20s
-2081-May-20	04:33:26	48409	4077	-50471	14	T	p-	-0.5958	1.0526	21S	40W	53	216	04m53s
-2081-Nov-13	21:31:06	48397	4075	-50465	19	P	t-	1.1104	0.7656	70N	105E	0		
-2080-Apr-09	14:38:25	48387	4073	-50460	-14	P	-t	1.1859	0.6625	72N	72E	0		
-2080-May-08	21:14:18	48385	4073	-50459	24	P	t-	-1.3099	0.4223	71S	116E	0		
-2080-Oct-03	02:13:33	48375	4071	-50454	-9	P	-t	-1.2558	0.5243	72S	93W	0		
-2079-Mar-30	05:39:51	48363	4069	-50448	-4	T	-p	0.4733	1.0269	23N	70W	62	103	02m33s
-2079-Sep-22	08:49:10	48351	4067	-50442	1	A	-p	-0.5024	0.9955	22S	120W	60	18	00m27s
-2078-Mar-19	14:21:03	48339	4065	-50436	6	A	nn	-0.2981	0.9710	24S	175E	73	109	03m12s
-2078-Sep-11	22:09:55	48327	4063	-50430	11	T	n-	0.2117	1.0467	23N	53E	78	159	04m08s
-2077-Mar-08	16:10:35	48315	4061	-50424	16	P	t-	-1.0650	0.8478	71S	90W	0		
-2077-Sep-01	14:20:21	48303	4058	-50418	21	T	p-	0.8964	1.0437	74N	146W	26	332	02m34s
-2076-Jan-27	02:04:55	48293	4057	-50413	-12	P	-t	1.1063	0.7861	67N	13W	0		
-2076-Jul-22	17:10:23	48281	4055	-50407	-7	P	-t	-1.0657	0.8666	66S	125E	0		
-2075-Jan-15	11:42:58	48269	4052	-50401	-2	T	-n	0.3414	1.0207	4S	151W	70	75	02m12s
-2075-Jul-11	22:05:41	48257	4050	-50395	3	A	-p	-0.3396	0.9511	4N	50E	70	190	06m41s
-2074-Jan-05	02:36:41	48245	4048	-50389	8	T	n-	-0.3561	1.0512	45S	19W	69	182	04m00s
-2074-Jun-30	22:30:15	48233	4046	-50383	13	A	p-	0.4131	0.9462	48N	35E	65	218	05m31s
-2074-Dec-25	18:20:29	48221	4044	-50377	18	P	t-	-1.0418	0.9255	64S	47W	0		
-2073-May-21	14:49:33	48211	4042	-50372	-15	Pe	-t	-1.5308	0.0231	62S	145W	0		
-2073-Jun-20	01:42:21	48209	4042	-50371	23	P	t-	1.1489	0.7158	64N	152W	0		
-2073-Nov-15	14:45:57	48199	4040	-50366	-10	P	-t	1.0937	0.8024	61N	140W	0		
-2072-May-10	04:31:58	48187	4038	-50360	-5	T	-p	-0.7182	1.0626	29S	27W	44	289	05m00s
-2072-Nov-03	15:52:37	48175	4036	-50354	0	A	-p	0.4371	0.9160	13N	153E	64	350	10m04s

-2071-Apr-29	21:42:27	48163	4034	-50348	5	Tm	nn	0.0311	1.0807	10N	53E	88	260	06m30s
-2071-Oct-23	15:05:59	48151	4032	-50342	10	A	n-	-0.2434	0.9298	18S	146E	76	270	07m42s
-2070-Apr-19	13:41:59	48139	4030	-50336	15	T	p-	0.7995	1.0372	48N	140E	37	204	02m37s
-2070-Oct-12	19:45:56	48127	4028	-50330	20	A	t-	-0.9177	0.9703	54S	33E	23	263	02m11s
-2069-Mar-10	10:48:33	48117	4026	-50325	-13	P	-t	-1.1567	0.6963	61S	27W	0		
-2069-Sep-02	21:34:45	48105	4024	-50319	-8	P	-t	1.1151	0.7952	62N	176E	0		
-2068-Feb-27	11:25:25	48093	4022	-50313	-3	A	-p	-0.4338	0.9366	38S	133W	64	260	06m30s
-2068-Aug-22	13:47:14	48081	4019	-50307	2	T	-p	0.4335	1.0468	41N	173W	64	172	03m34s
-2067-Feb-15	13:02:37	48069	4017	-50301	7	A	p-	0.3090	0.9629	1S	177W	72	140	04m20s
-2067-Aug-12	02:48:48	48057	4015	-50295	12	H	n-	-0.2963	1.0013	4N	27W	73	5	00m08s
-2066-Feb-04	21:18:23	48045	4013	-50289	17	P	t-	1.0161	0.9647	63N	23E	0		
-2066-Aug-01	09:05:18	48033	4011	-50283	22	P	t-	-1.0777	0.8313	64S	149W	0		
-2066-Dec-27	01:57:22	48023	4009	-50278	-11	T	-t	-0.9777	1.0361	78S	169E	11	625	01m47s
-2065-Jun-21	18:20:16	48011	4007	-50272	-6	P	-t	1.0565	0.8683	67N	70W	0		
-2065-Dec-16	17:00:16	47999	4005	-50266	-1	T	-n	-0.3182	1.0192	41S	123E	71	69	01m41s
-2064-Jun-09	23:26:10	47987	4003	-50260	4	H	nn	0.2539	1.0025	35N	23E	75	9	00m15s
-2064-Dec-05	02:59:56	47974	4001	-50254	9	A	n-	0.3911	0.9622	3N	23W	67	149	04m42s
-2063-May-30	11:47:43	47963	3999	-50248	14	T	p-	-0.5185	1.0559	13S	154W	59	215	05m24s
-2063-Nov-24	05:35:56	47951	3997	-50242	19	P	t-	1.1108	0.7648	70N	31W	0		
-2062-Apr-20	22:03:38	47941	3995	-50237	-14	P	-t	1.2574	0.5244	71N	55W	0		
-2062-May-20	04:36:23	47939	3995	-50236	24	P	t-	-1.2368	0.5649	70S	9W	0		
-2062-Oct-14	10:18:22	47929	3993	-50231	-9	P	-t	-1.2603	0.5167	72S	130E	0		
-2061-Apr-10	12:53:00	47917	3991	-50225	-4	T	-p	0.5447	1.0245	32N	176E	57	99	02m13s
-2061-Oct-03	17:11:32	47905	3989	-50219	1	A	-p	-0.5117	0.9962	26S	111E	59	15	00m22s
-2060-Mar-29	21:11:59	47893	3987	-50213	6	A	nn	-0.2285	0.9707	16S	68E	77	108	03m22s
-2060-Sep-22	06:40:47	47881	3984	-50207	11	T	n-	0.1949	1.0455	18N	77W	79	154	04m04s
-2059-Mar-18	22:51:19	47869	3982	-50201	16	A-	t-	-0.9981	0.9623	71S	154E	0		
-2059-Sep-11	22:42:57	47857	3980	-50195	21	T	p-	0.8744	1.0400	67N	77E	29	278	02m29s
-2058-Feb-06	09:43:20	47847	3978	-50190	-12	P	-t	1.1378	0.7327	68N	141W	0		
-2058-Aug-03	00:32:22	47835	3976	-50184	-7	P	-t	-1.1209	0.7659	68S	2E	0		
-2057-Jan-26	19:53:19	47823	3974	-50178	-2	T	-n	0.3663	1.0265	1S	84E	69	97	02m47s
-2057-Jul-23	04:54:06	47811	3972	-50172	3	A	-p	-0.4056	0.9462	0S	54W	66	217	07m31s
-2056-Jan-16	11:06:56	47799	3970	-50166	8	T	n-	-0.3376	1.0548	44S	145W	70	192	04m20s

-2056-Jul-11	05:07:01	47787	3968	-50160	13	A	p-	0.3392	0.9454	44N	62W	70	214	05m54s
-2055-Jan-05	02:53:37	47775	3966	-50154	18	P	t-	-1.0320	0.9438	65S	173E	0		
-2055-Jun-30	08:35:49	47763	3964	-50148	23	P	t-	1.0731	0.8509	64N	93E	0		
-2055-Nov-25	23:04:16	47753	3962	-50143	-10	P	-t	1.0972	0.7958	62N	85E	0		
-2054-May-21	11:48:59	47741	3960	-50137	-5	T	-p	-0.7931	1.0631	33S	138W	37	333	05m01s
-2054-Nov-14	23:54:37	47729	3958	-50131	0	A	-p	0.4400	0.9153	10N	29E	64	354	10m34s
-2053-May-11	05:04:58	47717	3956	-50125	5	T	nn	-0.0448	1.0802	10N	58W	87	259	06m35s
-2053-Nov-03	23:13:38	47705	3954	-50119	10	A	n-	-0.2399	0.9309	22S	22E	76	266	07m32s
-2052-Apr-29	20:52:34	47693	3952	-50113	15	T	p-	0.7268	1.0363	47N	34E	43	175	02m37s
-2052-Oct-23	04:14:09	47681	3950	-50107	20	A	t-	-0.9122	0.9721	57S	100W	24	241	01m59s
-2051-Mar-20	17:38:09	47671	3948	-50102	-13	P	-t	-1.2260	0.5768	61S	140W	0		
-2051-Sep-13	06:00:19	47659	3946	-50096	-8	P	-t	1.1363	0.7545	61N	39E	0		
-2051-Oct-12	16:20:31	47657	3945	-50095	30	Pb	t-	-1.5297	0.0177	61S	41E	0		
-2050-Mar-09	18:13:30	47647	3944	-50090	-3	A	-p	-0.4966	0.9396	37S	126E	60	255	06m04s
-2050-Sep-02	22:00:14	47635	3942	-50084	2	T	-p	0.4637	1.0412	39N	64E	62	155	03m08s
-2049-Feb-26	20:17:29	47623	3939	-50078	7	A	n-	0.2567	0.9692	1S	73E	75	114	03m27s
-2049-Aug-23	10:33:09	47611	3937	-50072	12	A	n-	-0.2585	0.9949	4N	145W	75	19	00m32s
-2048-Feb-16	05:09:45	47599	3935	-50066	17	T	t-	0.9751	1.0081	53N	90W	12	130	00m37s
-2048-Aug-11	16:13:34	47588	3933	-50060	22	P	t-	-1.0288	0.9131	63S	92E	0		
-2047-Jan-06	10:35:01	47578	3931	-50055	-11	Ts	-t	-0.9907	1.0368	72S	24E	7	-	01m45s
-2047-Jul-02	00:55:30	47566	3929	-50049	-6	P	-t	1.1303	0.7411	66N	179E	0		
-2047-Dec-27	01:35:00	47554	3927	-50043	-1	T	-n	-0.3266	1.0186	43S	4W	71	67	01m37s
-2046-Jun-21	06:23:18	47542	3925	-50037	4	H	-n	0.3282	1.0041	42N	82W	71	15	00m23s
-2046-Dec-16	11:17:43	47530	3923	-50031	9	A	n-	0.3875	0.9609	1N	150W	67	154	04m57s
-2045-Jun-10	19:06:39	47518	3921	-50025	14	T	p-	-0.4443	1.0583	6S	92E	64	214	05m44s
-2045-Dec-05	13:36:21	47506	3919	-50019	19	P	t-	1.1076	0.7701	69N	165W	0		
-2044-May-01	05:26:22	47496	3917	-50014	-14	P	-t	1.3306	0.3830	71N	179E	0		
-2044-May-30	12:00:53	47494	3917	-50013	24	P	t-	-1.1652	0.7041	69S	134W	0		
-2044-Oct-24	18:29:15	47484	3915	-50008	-9	P	-t	-1.2608	0.5158	71S	9W	0		
-2043-Apr-20	19:59:15	47472	3913	-50002	-4	T	-p	0.6209	1.0214	41N	64E	51	93	01m49s
-2043-Oct-14	01:41:49	47460	3911	-49996	1	A	-p	-0.5153	0.9972	31S	20W	59	11	00m16s
-2042-Apr-10	03:53:29	47448	3909	-49990	6	A	nn	-0.1515	0.9700	8S	37W	81	109	03m33s
-2042-Oct-03	15:19:58	47436	3907	-49984	11	T	n-	0.1847	1.0445	13N	151E	79	151	04m01s

-2041-Mar-30	05:22:40	47424	3905	-49978	16	A	t-	-0.9232	0.9360	65S	19W	22	623	05m14s
-2041-Sep-23	07:14:08	47412	3903	-49972	21	T	p-	0.8598	1.0363	62N	58W	30	239	02m23s
-2040-Feb-17	17:14:47	47403	3901	-49967	-12	P	-t	1.1755	0.6675	69N	92E	0		
-2040-Aug-13	08:00:50	47391	3899	-49961	-7	P	-t	-1.1697	0.6777	69S	123W	0		
-2039-Feb-06	03:58:18	47379	3897	-49955	-2	T	-n	0.3965	1.0324	3N	40W	67	119	03m20s
-2039-Aug-02	11:48:53	47367	3895	-49949	3	A	-p	-0.4656	0.9412	6S	161W	62	246	08m14s
-2038-Jan-26	19:30:32	47355	3893	-49943	8	T	n-	-0.3131	1.0585	41S	90E	72	203	04m42s
-2038-Jul-22	11:51:38	47343	3891	-49937	13	A	pn	0.2710	0.9442	39N	162W	74	214	06m20s
-2037-Jan-16	11:19:51	47331	3888	-49931	18	P	t-	-1.0170	0.9720	66S	34E	0		
-2037-Jul-11	15:38:20	47319	3886	-49925	23	A+	t-	1.0031	0.9757	65N	25W	0		
-2037-Dec-07	07:18:32	47309	3885	-49920	-10	P	-t	1.1033	0.7849	63N	49W	0		
-2036-May-31	19:10:17	47297	3883	-49914	-5	T	-p	-0.8651	1.0625	38S	110E	30	403	04m54s
-2036-Nov-25	07:55:36	47285	3881	-49908	0	A	-p	0.4435	0.9152	7N	94W	64	356	11m02s
-2035-May-21	12:27:13	47274	3878	-49902	5	T	nn	-0.1209	1.0788	9N	169W	83	256	06m39s
-2035-Nov-14	07:23:28	47262	3876	-49896	10	A	n-	-0.2375	0.9326	26S	102W	76	259	07m19s
-2034-May-11	03:59:41	47250	3874	-49890	15	T	p-	0.6519	1.0345	47N	70W	49	152	02m32s
-2034-Nov-03	12:46:00	47238	3872	-49884	20	A	p-	-0.9087	0.9744	60S	126E	24	217	01m45s
-2033-Apr-01	00:18:10	47228	3870	-49879	-13	P	-t	-1.3022	0.4454	60S	110E	0		
-2033-Apr-30	13:34:05	47226	3870	-49878	25	Pb	t-	1.4816	0.1264	61N	67E	0		
-2033-Sep-24	14:34:28	47216	3868	-49873	-8	P	-t	1.1510	0.7261	61N	100W	0		
-2033-Oct-24	01:06:48	47214	3868	-49872	30	P	t-	-1.5239	0.0283	61S	101W	0		
-2032-Mar-20	00:53:26	47204	3866	-49867	-3	A	-p	-0.5666	0.9422	37S	27E	55	255	05m42s
-2032-Sep-13	06:20:41	47192	3864	-49861	2	T	-p	0.4875	1.0357	36N	62W	61	136	02m45s
-2031-Mar-09	03:25:19	47180	3862	-49855	7	A	nn	0.1973	0.9754	1S	35W	79	89	02m38s
-2031-Sep-02	18:25:21	47168	3860	-49849	12	A	nn	-0.2279	0.9885	2N	96E	77	42	01m11s
-2030-Feb-26	12:51:51	47157	3858	-49843	17	T	t-	0.9256	1.0174	46N	155E	22	155	01m21s
-2030-Aug-22	23:30:47	47145	3856	-49837	22	As	t-	-0.9876	0.9309	56S	17W	8	-	06m04s
-2029-Jan-17	19:04:58	47135	3854	-49832	-11	P	-t	-1.0103	0.9937	64S	111W	0		
-2029-Jul-13	07:39:07	47123	3852	-49826	-6	P	-t	1.1977	0.6251	65N	65E	0		
-2028-Jan-07	10:02:51	47111	3850	-49820	-1	T	-n	-0.3404	1.0183	44S	130W	70	67	01m34s
-2028-Jul-01	13:28:00	47099	3848	-49814	4	H	-p	0.3973	1.0052	47N	173E	66	20	00m28s
-2028-Dec-26	19:30:35	47087	3846	-49808	9	A	n-	0.3807	0.9601	1S	84E	68	157	05m06s
-2027-Jun-21	02:28:37	47075	3844	-49802	14	T	p-	-0.3719	1.0599	1N	22W	68	212	05m55s

-2027-Dec-15	21:34:17	47063	3842	-49796	19	P	t-	1.1025	0.7787	68N	62E	0		
-2026-May-12	12:46:05	47054	3840	-49791	-14	P	-t	1.4060	0.2379	70N	54E	0		
-2026-Jun-10	19:26:25	47052	3840	-49790	24	P	t-	-1.0944	0.8415	68S	101E	0		
-2026-Nov-05	02:44:36	47042	3838	-49785	-9	P	-t	-1.2584	0.5200	71S	149W	0		
-2025-May-02	03:01:08	47030	3836	-49779	-4	T	-p	0.6996	1.0174	51N	49W	45	83	01m23s
-2025-Oct-25	10:17:25	47018	3834	-49773	1	A	-p	-0.5155	0.9988	36S	151W	59	5	00m07s
-2024-Apr-20	10:30:23	47006	3832	-49767	6	Am	nn	-0.0718	0.9690	1N	140W	86	112	03m45s
-2024-Oct-14	00:03:37	46994	3830	-49761	11	T	n-	0.1781	1.0438	8N	17E	80	148	04m00s
-2023-Apr-09	11:49:46	46982	3828	-49755	16	A	p-	-0.8444	0.9402	53S	134W	32	410	05m34s
-2023-Oct-03	15:51:05	46970	3826	-49749	21	T	p-	0.8506	1.0326	57N	166E	31	209	02m15s
-2022-Feb-28	00:37:49	46960	3824	-49744	-12	P	-t	1.2207	0.5879	70N	33W	0		
-2022-Aug-24	15:37:25	46949	3822	-49738	-7	P	-t	-1.2108	0.6043	70S	108E	0		
-2021-Feb-17	11:54:10	46937	3820	-49732	-2	T	-n	0.4350	1.0382	8N	163W	64	142	03m49s
-2021-Aug-13	18:53:27	46925	3818	-49726	3	A	-p	-0.5171	0.9364	11S	89E	59	276	08m46s
-2020-Feb-07	03:44:53	46913	3816	-49720	8	T	n-	-0.2811	1.0621	37S	33W	73	213	05m05s
-2020-Aug-01	18:47:24	46901	3814	-49714	13	A	nn	0.2115	0.9430	35N	95E	78	216	06m45s
-2019-Jan-26	19:36:47	46889	3812	-49708	18	Ts	t-	-0.9952	1.0195	71S	105W	4	-	00m57s
-2019-Jul-21	22:49:07	46878	3810	-49702	23	A	t-	0.9387	0.9781	86N	132W	20	233	01m20s
-2019-Dec-17	15:28:25	46868	3808	-49697	-10	P	-t	1.1121	0.7697	64N	177E	0		
-2018-Jun-12	02:33:11	46856	3806	-49691	-5	T	-t	-0.9359	1.0603	46S	2W	20	562	04m31s
-2018-Dec-06	15:54:17	46844	3804	-49685	0	A	-p	0.4487	0.9160	5N	144E	63	355	11m23s
-2017-Jun-01	19:49:17	46832	3802	-49679	5	T	-n	-0.1966	1.0764	8N	79E	79	252	06m40s
-2017-Nov-25	15:34:58	46820	3800	-49673	10	A	n-	-0.2362	0.9350	30S	134E	76	249	07m03s
-2016-May-21	11:04:24	46808	3798	-49667	15	T	p-	0.5758	1.0319	47N	173W	55	131	02m25s
-2016-Nov-13	21:20:55	46797	3796	-49661	20	A	p-	-0.9070	0.9771	64S	9W	25	193	01m30s
-2015-Apr-11	06:51:47	46787	3794	-49656	-13	P	-t	-1.3824	0.3070	60S	1E	0		
-2015-May-10	20:10:16	46785	3794	-49655	25	P	t-	1.4042	0.2639	61N	42W	0		
-2015-Oct-04	23:15:09	46775	3792	-49650	-8	P	-t	1.1608	0.7073	61N	119E	0		
-2015-Nov-03	09:57:02	46773	3792	-49649	30	P	t-	-1.5209	0.0334	61S	116E	0		
-2014-Mar-31	07:26:07	46763	3790	-49644	-3	A	-p	-0.6425	0.9446	37S	71W	50	260	05m24s
-2014-Sep-24	14:48:13	46751	3788	-49638	2	T	-p	0.5050	1.0305	33N	170E	59	118	02m24s
-2013-Mar-20	10:27:40	46739	3786	-49632	7	A	nn	0.1324	0.9815	1S	142W	82	66	01m55s
-2013-Sep-14	02:24:10	46727	3784	-49626	12	A	nn	-0.2037	0.9824	0N	26W	78	64	01m48s

-2012-Mar-08	20:29:02	46716	3782	-49620	17	T	t-	0.8711	1.0256	42N	40E	29	173	02m00s
-2012-Sep-02	06:56:16	46704	3780	-49614	22	A	p-	-0.9534	0.9283	50S	127W	17	881	06m37s
-2011-Jan-28	03:27:38	46694	3778	-49609	-11	P	-t	-1.0361	0.9460	64S	112E		0	
-2011-Jul-23	14:31:16	46682	3776	-49603	-6	P	-t	1.2586	0.5203	64N	49W		0	
-2010-Jan-17	18:22:18	46670	3774	-49597	-1	T	-n	-0.3606	1.0182	44S	108E	69	67	01m32s
-2010-Jul-12	20:41:22	46658	3772	-49591	4	H	-p	0.4605	1.0057	51N	67E	62	22	00m29s
-2009-Jan-07	03:33:16	46647	3770	-49585	9	A	n-	0.3659	0.9598	3S	39W	69	157	05m08s
-2009-Jul-02	09:58:14	46635	3768	-49579	14	T	n-	-0.3051	1.0606	6N	138W	72	209	05m57s
-2009-Dec-27	05:24:54	46623	3766	-49573	19	P	t-	1.0913	0.7978	67N	68W		0	
-2008-May-22	20:05:19	46613	3764	-49568	-14	Pe	-t	1.4811	0.0939	70N	71W		0	
-2008-Jun-21	02:55:53	46611	3764	-49567	24	P	t-	-1.0268	0.9720	67S	25W		0	
-2008-Nov-15	11:01:59	46601	3762	-49562	-9	P	-t	-1.2551	0.5257	70S	72E		0	
-2007-May-12	09:59:00	46589	3760	-49556	-4	T	-p	0.7808	1.0126	61N	162W	38	69	00m55s
-2007-Nov-04	18:57:31	46578	3758	-49550	1	H	-p	-0.5126	1.0009	40S	77E	59	4	00m05s
-2006-May-01	16:59:49	46566	3756	-49544	6	A	nn	0.0134	0.9673	10N	118E	89	118	03m58s
-2006-Oct-25	08:53:45	46554	3754	-49538	11	T	n-	0.1767	1.0434	4N	118W	80	147	04m00s
-2005-Apr-20	18:10:52	46542	3752	-49532	16	A	p-	-0.7604	0.9436	42S	120E	40	316	05m53s
-2005-Oct-15	00:33:49	46530	3750	-49526	21	T	p-	0.8465	1.0292	52N	30E	32	185	02m07s
-2004-Mar-10	07:54:55	46520	3748	-49521	-12	P	-t	1.2715	0.4975	71N	158W		0	
-2004-Apr-08	20:13:46	46519	3748	-49520	26	Pb	t-	-1.4844	0.1236	72S	161E		0	
-2004-Sep-03	23:21:54	46509	3746	-49515	-7	P	-t	-1.2446	0.5447	70S	22W		0	
-2003-Feb-27	19:43:58	46497	3744	-49509	-2	T	-p	0.4792	1.0438	14N	76E	61	166	04m13s
-2003-Aug-24	02:05:29	46485	3742	-49503	3	A	-p	-0.5619	0.9316	16S	23W	56	308	09m09s
-2002-Feb-17	11:52:08	46473	3740	-49497	8	T	n-	-0.2429	1.0657	32S	156W	76	222	05m29s
-2002-Aug-13	01:52:34	46461	3738	-49491	13	A	nn	0.1593	0.9416	29N	13W	81	219	07m08s
-2001-Feb-07	03:44:41	46450	3736	-49485	18	T	p-	-0.9667	1.0234	81S	92E	14	327	01m15s
-2001-Aug-02	06:10:47	46438	3734	-49479	23	A	t-	0.8823	0.9806	84N	51W	28	149	01m16s
-2001-Dec-28	23:31:36	46428	3732	-49474	-10	P	-t	1.1252	0.7472	65N	45E		0	
-2000-Jun-22	10:01:15	46416	3730	-49468	-5	T-	-t	-1.0028	1.0163	64S	108W		0	
-2000-Dec-16	23:48:15	46405	3728	-49462	0	A	-p	0.4576	0.9172	4N	23E	63	352	11m36s

2ND MILLENNIUM BCE

In the 2nd millennium BCE the total number of solar eclipses was 2 401 solar eclipses: 843 partial solar eclipses, 782 annular solar eclipses (759 central annular solar eclipses with two limits, 11 central annular solar eclipses with one limit, 12 non-central annular solar eclipses with one limit), 633 total solar eclipses (622 central total solar eclipses with two limits, 7 central total solar eclipses with one limit, 4 non-central total solar eclipses with one limit), 143 hybrid solar eclipses.

20TH CENTURY BCE

In the 20th century BCE the total number of solar eclipses was 238 solar eclipses: 83 partial solar eclipses, 71 annular solar eclipses (69 central annular solar eclipses with two limits, 1 central annular solar eclipses with one limit, 1 non-central annular solar eclipses with one limit), 62 total solar eclipses (62 central total solar eclipses with two limits, 0 central total solar eclipses with one limit, 0 non-central total solar eclipses with one limit), 22 hybrid solar eclipses.

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°	°	ALT	WIDTH	DUR.
			GREATEST	S								°	km	
			ECLIPSE											
-1999-Jun-12	03:13:45	46393	3726	-49456	5	T	-n	-0.2699	1.0733	6N	33W	74	247	06m37s

-1999-Dec-05	23:44:08	46381	3724	-49450	10	A	n-	-0.2319	0.9382	33S	11E	76	236	06m44s
-1998-Jun-01	18:08:12	46369	3722	-49444	15	T	p-	0.4996	1.0284	46N	83E	60	111	02m15s
-1998-Nov-25	05:56:01	46357	3720	-49438	20	A	p-	-0.9048	0.9805	68S	144W	25	163	01m14s
-1997-Apr-22	13:19:00	46347	3718	-49433	-13	P	-t	-1.4667	0.1617	61S	106W	0		
-1997-May-22	02:44:37	46345	3718	-49432	25	P	t-	1.3256	0.4030	62N	152W	0		
-1997-Oct-16	08:01:06	46336	3716	-49427	-8	P	-t	1.1666	0.6959	61N	23W	0		
-1997-Nov-14	18:48:02	46334	3716	-49426	30	P	t-	-1.5185	0.0373	62S	28W	0		
-1996-Apr-10	13:53:45	46324	3714	-49421	-3	A	-p	-0.7228	0.9464	38S	167W	43	277	05m11s
-1996-Oct-04	23:22:34	46312	3712	-49415	2	T	-p	0.5163	1.0257	29N	39E	59	101	02m04s
-1995-Mar-30	17:23:34	46300	3710	-49409	7	A	nn	0.0611	0.9873	0S	113E	86	45	01m17s
-1995-Sep-24	10:30:37	46289	3708	-49403	12	A	nn	-0.1866	0.9766	3S	150W	79	85	02m22s
-1994-Mar-20	03:58:32	46277	3706	-49397	17	T	p-	0.8093	1.0333	39N	73W	36	186	02m35s
-1994-Sep-13	14:30:49	46265	3704	-49391	22	A	p-	-0.9268	0.9249	48S	116E	22	734	06m57s
-1993-Feb-08	11:40:52	46255	3702	-49386	-11	P	-t	-1.0697	0.8829	63S	23W	0		
-1993-Mar-09	19:47:06	46253	3702	-49385	27	Pb	t-	1.4908	0.0752	61N	11E	0		
-1993-Aug-03	21:34:24	46243	3700	-49380	-6	P	-t	1.3114	0.4297	63N	167W	0		
-1992-Jan-29	02:33:38	46232	3698	-49374	-1	T	-p	-0.3873	1.0181	44S	13W	67	67	01m30s
-1992-Jul-23	04:02:42	46220	3696	-49368	4	H	-p	0.5180	1.0059	54N	39W	59	24	00m29s
-1991-Jan-17	11:28:55	46208	3694	-49362	9	A	n-	0.3461	0.9599	4S	160W	70	155	05m03s
-1991-Jul-12	17:33:25	46196	3692	-49356	14	T	n-	-0.2422	1.0606	10N	106E	76	205	05m50s
-1990-Jan-06	13:08:52	46184	3690	-49350	19	P	t-	1.0750	0.8256	65N	163E	0		
-1990-Jul-02	10:29:02	46173	3688	-49344	24	T	t-	-0.9624	1.0608	51S	149W	15	757	04m30s
-1990-Nov-26	19:20:27	46163	3686	-49339	-9	P	-t	-1.2517	0.5316	69S	67W	0		
-1989-May-23	16:55:39	46151	3684	-49333	-4	H	-t	0.8616	1.0067	72N	79E	30	46	00m27s
-1989-Nov-16	03:38:41	46139	3682	-49327	1	H	-n	-0.5095	1.0036	44S	54W	59	14	00m18s
-1988-May-11	23:28:02	46128	3680	-49321	6	A	nn	0.0988	0.9652	18N	17E	84	126	04m11s
-1988-Nov-04	17:46:05	46116	3678	-49315	11	T	n-	0.1768	1.0435	1S	106E	80	148	04m04s
-1987-May-01	00:28:50	46104	3676	-49309	16	A	p-	-0.6733	0.9464	32S	17E	47	264	06m10s
-1987-Oct-25	09:20:17	46092	3674	-49303	21	T	p-	0.8461	1.0260	48N	107W	32	165	01m58s
-1986-Mar-21	15:05:31	46083	3672	-49298	-12	P	-t	1.3283	0.3950	71N	79E	0		
-1986-Apr-20	02:54:00	46081	3672	-49297	26	P	t-	-1.4035	0.2647	72S	45E	0		
-1986-Sep-15	07:13:58	46071	3670	-49292	-7	P	-t	-1.2710	0.4984	71S	155W	0		
-1985-Mar-11	03:25:22	46059	3668	-49286	-2	T	-p	0.5311	1.0490	20N	44W	58	191	04m29s

-1985-Sep-04	09:27:56	46047	3666	-49280	3	A	-p	-0.5976	0.9272	22S	138W	53	338	09m22s
-1984-Feb-28	19:50:43	46036	3664	-49274	8	T	n-	-0.1976	1.0690	25S	82E	78	229	05m53s
-1984-Aug-23	09:08:19	46024	3662	-49268	13	A	nn	0.1152	0.9402	24N	123W	83	223	07m27s
-1983-Feb-17	11:42:58	46012	3660	-49262	18	T	p-	-0.9310	1.0259	79S	89W	21	247	01m30s
-1983-Aug-12	13:42:34	46000	3658	-49256	23	A	p-	0.8333	0.9820	75N	168W	33	116	01m15s
-1982-Jan-08	07:25:53	45991	3657	-49251	-10	P	-t	1.1450	0.7134	66N	86W	0		
-1982-Jul-03	17:33:56	45979	3655	-49245	-5	P	-t	-1.0662	0.8936	65S	127E	0		
-1982-Aug-02	01:39:47	45977	3654	-49244	33	Pb	t-	1.4998	0.0675	67N	157E	0		
-1982-Dec-28	07:36:54	45967	3652	-49239	0	A	-p	0.4708	0.9191	4N	97W	62	346	11m38s
-1981-Jun-23	10:41:00	45955	3650	-49233	5	T	-n	-0.3405	1.0693	3N	147W	70	240	06m28s
-1981-Dec-17	07:50:57	45944	3648	-49227	10	A	n-	-0.2251	0.9420	35S	111W	77	220	06m21s
-1980-Jun-12	01:12:55	45932	3646	-49221	15	T	p-	0.4250	1.0242	45N	20W	65	91	02m00s
-1980-Dec-05	14:31:18	45920	3644	-49215	20	A	p-	-0.9020	0.9845	72S	82E	25	128	00m58s
-1979-May-02	19:41:05	45910	3643	-49210	-13	Pe	-t	-1.5539	0.0116	61S	147E	0		
-1979-Jun-01	09:16:38	45908	3642	-49209	25	P	t-	1.2455	0.5437	62N	99E	0		
-1979-Oct-26	16:51:58	45899	3641	-49204	-8	P	-t	1.1688	0.6915	61N	166W	0		
-1979-Nov-25	03:40:29	45897	3640	-49203	30	P	t-	-1.5172	0.0389	62S	172W	0		
-1978-Apr-21	20:17:25	45887	3639	-49198	-3	A	-p	-0.8061	0.9476	41S	98E	36	314	05m00s
-1978-Oct-16	08:01:31	45875	3637	-49192	2	T	-p	0.5235	1.0214	25N	94W	58	84	01m47s
-1977-Apr-11	00:16:37	45863	3635	-49186	7	A	nn	-0.0136	0.9927	0N	9E	89	26	00m44s
-1977-Oct-05	18:42:39	45852	3633	-49180	12	A	nn	-0.1750	0.9713	7S	85E	80	104	02m53s
-1976-Mar-30	11:24:49	45840	3631	-49174	17	T	p-	0.7438	1.0404	38N	175E	42	198	03m05s
-1976-Sep-23	22:11:45	45828	3629	-49168	22	A	p-	-0.9056	0.9215	48S	3W	25	679	07m10s
-1975-Feb-18	19:46:33	45818	3627	-49163	-11	P	-t	-1.1097	0.8074	62S	155W	0		
-1975-Mar-20	03:31:43	45817	3627	-49162	27	P	t-	1.4355	0.1809	61N	115W	0		
-1975-Aug-14	04:47:45	45807	3625	-49157	-6	P	-t	1.3566	0.3521	63N	74E	0		
-1974-Feb-08	10:33:31	45795	3623	-49151	-1	T	-p	-0.4228	1.0179	43S	132W	65	68	01m28s
-1974-Aug-03	11:34:54	45783	3621	-49145	4	H	-p	0.5675	1.0057	55N	148W	55	24	00m27s
-1973-Jan-28	19:12:37	45772	3619	-49139	9	A	n-	0.3170	0.9602	4S	82E	72	152	04m54s
-1973-Jul-24	01:17:36	45760	3617	-49133	14	T	n-	-0.1866	1.0601	13N	11W	79	201	05m38s
-1972-Jan-17	20:42:36	45748	3615	-49127	19	P	t-	1.0503	0.8676	64N	38E	0		
-1972-Jul-12	18:08:30	45736	3613	-49121	24	T	p-	-0.9034	1.0603	41S	90E	25	464	04m50s
-1972-Dec-07	03:37:44	45727	3611	-49116	-9	P	-t	-1.2500	0.5347	68S	155E	0		

-1971-Jun-02	23:49:29	45715	3609	-49110	-4	A	-t	0.9435	0.9992	81N	80W	19	8	00m03s
-1971-Nov-26	12:21:27	45703	3607	-49104	1	H	-n	-0.5059	1.0069	48S	175E	59	28	00m34s
-1970-May-23	05:52:06	45692	3605	-49098	6	A	nn	0.1870	0.9625	27N	83W	79	138	04m23s
-1970-Nov-16	02:40:27	45680	3603	-49092	11	T	n-	0.1786	1.0442	4S	29W	80	150	04m10s
-1969-May-12	06:44:38	45668	3601	-49086	16	A	p-	-0.5839	0.9485	22S	83W	54	231	06m24s
-1969-Nov-05	18:10:12	45656	3599	-49080	21	T	p-	0.8487	1.0233	45N	115E	32	149	01m51s
-1968-Mar-31	22:12:00	45647	3598	-49075	-12	P	-t	1.3890	0.2843	71N	43W	0		
-1968-Apr-30	09:32:57	45645	3597	-49074	26	P	t-	-1.3202	0.4112	71S	71W	0		
-1968-Sep-25	15:12:08	45635	3596	-49069	-7	P	-t	-1.2916	0.4629	71S	69E	0		
-1967-Mar-21	11:02:00	45623	3594	-49063	-2	T	-p	0.5876	1.0537	28N	163W	54	218	04m38s
-1967-Sep-14	16:58:13	45612	3592	-49057	3	A	-p	-0.6263	0.9232	27S	105E	51	368	09m27s
-1966-Mar-11	03:41:20	45600	3590	-49051	8	T	n-	-0.1457	1.0719	19S	39W	82	236	06m14s
-1966-Sep-03	16:34:32	45588	3588	-49045	13	A	nn	0.0795	0.9390	19N	123E	85	227	07m41s
-1965-Feb-28	19:32:25	45577	3586	-49039	18	T	p-	-0.8890	1.0279	72S	125E	27	208	01m44s
-1965-Aug-23	21:24:41	45565	3584	-49033	23	A	p-	0.7920	0.9831	68N	73E	37	98	01m14s
-1964-Jan-19	15:10:59	45555	3582	-49028	-10	P	-t	1.1712	0.6688	67N	145E	0		
-1964-Jul-14	01:14:01	45543	3580	-49022	-5	P	-t	-1.1236	0.7824	66S	0E	0		
-1964-Aug-12	09:35:07	45541	3580	-49021	33	P	t-	1.4541	0.1537	68N	25E	0		
-1963-Jan-07	15:18:08	45532	3578	-49016	0	A	-p	0.4899	0.9215	5N	145E	61	340	11m26s
-1963-Jul-03	18:11:53	45520	3576	-49010	5	T	-p	-0.4075	1.0646	0S	98E	66	231	06m12s
-1963-Dec-27	15:52:46	45508	3574	-49004	10	A	n-	-0.2136	0.9464	36S	130E	77	202	05m54s
-1962-Jun-23	08:19:51	45497	3572	-48998	15	T	n-	0.3535	1.0193	43N	124W	69	71	01m41s
-1962-Dec-16	23:02:08	45485	3570	-48992	20	A	p-	-0.8951	0.9893	76S	47W	26	85	00m39s
-1961-Jun-12	15:50:44	45473	3568	-48986	25	P	t-	1.1678	0.6793	63N	10W	0		
-1961-Nov-07	01:45:28	45464	3566	-48981	-8	P	-t	1.1688	0.6915	61N	50E	0		
-1961-Dec-06	12:30:45	45462	3566	-48980	30	P	t-	-1.5146	0.0425	63S	45E	0		
-1960-May-02	02:38:40	45452	3564	-48975	-3	A	-p	-0.8915	0.9480	45S	5E	27	409	04m49s
-1960-Oct-26	16:44:14	45440	3562	-48969	2	T	-p	0.5269	1.0175	21N	132E	58	70	01m31s
-1959-Apr-21	07:06:21	45429	3560	-48963	7	A	nn	-0.0920	0.9977	1N	95W	85	8	00m14s
-1959-Oct-16	03:00:35	45417	3558	-48957	12	A	nn	-0.1691	0.9665	11S	42W	80	122	03m23s
-1958-Apr-10	18:44:40	45405	3556	-48951	17	T	p-	0.6721	1.0468	37N	65E	48	206	03m32s
-1958-Oct-05	06:01:10	45394	3554	-48945	22	A	p-	-0.8917	0.9183	50S	125W	27	665	07m16s
-1957-Mar-02	03:43:09	45384	3553	-48940	-11	P	-t	-1.1571	0.7173	61S	75E	0		

-1957-Mar-31	11:09:32	45382	3552	-48939	27	P	t-	1.3745	0.2984	61N	120E	0		
-1957-Aug-25	12:12:02	45372	3551	-48934	-6	P	-t	1.3934	0.2890	62N	48W	0		
-1956-Feb-19	18:24:50	45360	3549	-48928	-1	T	-p	-0.4647	1.0176	42S	112E	62	68	01m25s
-1956-Aug-13	19:16:39	45349	3547	-48922	4	H	-p	0.6098	1.0054	54N	101E	52	23	00m25s
-1955-Feb-08	02:47:06	45337	3545	-48916	9	A	nn	0.2813	0.9608	4S	33W	74	148	04m41s
-1955-Aug-03	09:08:12	45326	3543	-48910	14	T	n-	-0.1360	1.0589	14N	130W	82	196	05m22s
-1954-Jan-28	04:08:24	45314	3541	-48904	19	A+	t-	1.0193	0.9205	63N	85W	0		
-1954-Jul-24	01:53:41	45302	3539	-48898	24	T	p-	-0.8495	1.0580	34S	31W	32	361	04m51s
-1954-Dec-18	11:51:35	45293	3537	-48893	-9	P	-t	-1.2518	0.5319	67S	18E	0		
-1953-Jun-14	06:45:24	45281	3535	-48887	-4	P	-t	1.0223	0.9490	68N	99E	0		
-1953-Dec-07	21:02:13	45269	3533	-48881	1	H	-n	-0.5050	1.0107	51S	47E	59	43	00m52s
-1952-Jun-02	12:17:06	45258	3531	-48875	6	A	np	0.2735	0.9595	35N	179E	74	153	04m34s
-1952-Nov-26	11:33:43	45246	3529	-48869	11	T	n-	0.1793	1.0452	8S	165W	80	153	04m18s
-1951-May-22	13:01:21	45234	3527	-48863	16	A	p-	-0.4945	0.9502	13S	177E	60	209	06m34s
-1951-Nov-16	02:59:59	45223	3525	-48857	21	T	p-	0.8520	1.0211	42N	23W	31	137	01m44s
-1950-Apr-12	05:13:31	45213	3523	-48852	-12	P	-t	1.4542	0.1643	71N	164W	0		
-1950-May-11	16:11:24	45211	3523	-48851	26	P	t-	-1.2352	0.5621	71S	175E	0		
-1950-Oct-06	23:16:52	45201	3521	-48846	-7	P	-t	-1.3058	0.4387	72S	68W	0		
-1949-Apr-01	18:32:35	45190	3519	-48840	-2	T	-p	0.6495	1.0576	36N	78E	49	248	04m39s
-1949-Sep-26	00:36:46	45178	3517	-48834	3	A	-p	-0.6477	0.9197	33S	14W	49	394	09m25s
-1948-Mar-21	11:24:40	45166	3515	-48828	8	T	nn	-0.0879	1.0742	11S	158W	85	242	06m31s
-1948-Sep-14	00:11:42	45155	3514	-48822	13	A	nn	0.0522	0.9380	13N	7E	87	231	07m50s
-1947-Mar-11	03:11:16	45143	3512	-48816	18	T	p-	-0.8390	1.0294	63S	4W	33	183	01m59s
-1947-Sep-03	05:17:29	45132	3510	-48810	23	A	p-	0.7586	0.9839	61N	48W	40	88	01m14s
-1946-Jan-29	22:45:39	45122	3508	-48805	-10	P	-t	1.2050	0.6112	68N	19E	0		
-1946-Jul-25	09:01:01	45110	3506	-48799	-5	P	-t	-1.1755	0.6822	67S	129W	0		
-1946-Aug-23	17:40:01	45108	3506	-48798	33	P	t-	1.4159	0.2259	69N	110W	0		
-1945-Jan-18	22:50:44	45099	3504	-48793	0	A	-p	0.5160	0.9243	8N	29E	59	333	10m58s
-1945-Jul-15	01:48:21	45087	3502	-48787	5	T	-p	-0.4691	1.0593	4S	18W	62	221	05m48s
-1944-Jan-07	23:50:10	45075	3500	-48781	10	A	n-	-0.1979	0.9514	35S	11E	78	182	05m24s
-1944-Jul-03	15:28:59	45064	3498	-48775	15	H	n-	0.2848	1.0139	40N	131E	73	50	01m16s
-1944-Dec-27	07:30:30	45052	3496	-48769	20	A	p-	-0.8855	0.9946	80S	169W	27	41	00m20s
-1943-Jun-22	22:26:07	45040	3494	-48763	25	P	t-	1.0916	0.8109	64N	120W	0		

-1943-Nov-17	10:40:07	45031	3492	-48758	-8	P	-t	1.1682	0.6923	62N	94W	0		
-1943-Dec-16	21:18:01	45029	3492	-48757	30	P	t-	-1.5094	0.0510	64S	98W	0		
-1942-May-13	08:58:58	45019	3490	-48752	-3	A	-t	-0.9780	0.9462	55S	82W	11	969	04m34s
-1942-Nov-07	01:29:06	45007	3488	-48746	2	H3	-p	0.5281	1.0143	17N	2W	58	57	01m17s
-1941-May-02	13:56:20	44996	3486	-48740	7	Hm	nn	-0.1715	1.0021	1N	162E	80	7	00m12s
-1941-Oct-27	11:20:15	44984	3484	-48734	12	A	nn	-0.1652	0.9623	15S	169W	80	138	03m49s
-1940-Apr-21	02:03:31	44973	3483	-48728	17	T	p-	0.5985	1.0524	37N	45W	53	214	03m56s
-1940-Oct-15	13:55:21	44961	3481	-48722	22	A	p-	-0.8820	0.9156	52S	112E	28	663	07m17s
-1939-Mar-12	11:31:15	44951	3479	-48717	-11	P	-t	-1.2112	0.6137	61S	53W	0		
-1939-Apr-10	18:41:40	44949	3479	-48716	27	P	t-	1.3087	0.4257	61N	4W	0		
-1939-Sep-04	19:46:43	44940	3477	-48711	-6	P	-t	1.4227	0.2390	61N	173W	0		
-1939-Oct-04	13:00:06	44938	3477	-48710	32	P	t-	-1.5484	0.0362	61S	85E	0		
-1938-Mar-02	02:04:40	44928	3475	-48705	-1	T	-p	-0.5153	1.0169	41S	2W	59	67	01m21s
-1938-Aug-25	03:09:12	44917	3473	-48699	4	H	-p	0.6442	1.0050	53N	15W	50	22	00m23s
-1937-Feb-19	10:08:37	44905	3471	-48693	9	A	nn	0.2354	0.9613	4S	145W	76	144	04m29s
-1937-Aug-14	17:09:04	44893	3469	-48687	14	T	n-	-0.0935	1.0574	15N	109E	85	190	05m05s
-1936-Feb-08	11:23:36	44882	3467	-48681	19	An	t-	0.9794	0.9202	54N	168E	11	-	07m38s
-1936-Aug-03	09:45:22	44870	3465	-48675	24	T	p-	-0.8012	1.0548	30S	153W	37	300	04m40s
-1936-Dec-28	20:01:18	44860	3463	-48670	-9	P	-t	-1.2578	0.5217	66S	117W	0		
-1935-Jun-24	13:42:00	44849	3461	-48664	-4	P	-t	1.0996	0.8074	67N	18W	0		
-1935-Dec-18	05:40:03	44837	3460	-48658	1	H2	-p	-0.5069	1.0150	53S	80W	59	60	01m11s
-1934-Jun-13	18:41:58	44826	3458	-48652	6	A	-p	0.3594	0.9558	43N	81E	69	173	04m44s
-1934-Dec-07	20:25:52	44814	3456	-48646	11	T	n-	0.1789	1.0468	10S	60E	80	158	04m28s
-1933-Jun-02	19:19:37	44802	3454	-48640	16	A	p-	-0.4060	0.9513	5S	78E	66	195	06m39s
-1933-Nov-27	11:49:04	44791	3452	-48634	21	T	p-	0.8554	1.0194	40N	161W	31	128	01m39s
-1932-Apr-22	12:13:49	44781	3450	-48629	-12	Pe	-t	1.5209	0.0402	71N	75E	0		
-1932-May-21	22:52:06	44779	3450	-48628	26	P	t-	-1.1505	0.7135	70S	60E	0		
-1932-Oct-17	07:26:27	44770	3448	-48623	-7	P	-t	-1.3152	0.4229	72S	154E	0		
-1931-Apr-12	01:58:43	44758	3446	-48617	-2	T	-p	0.7158	1.0609	45N	41W	44	284	04m33s
-1931-Oct-06	08:22:29	44746	3444	-48611	3	A	-p	-0.6629	0.9167	38S	135W	48	418	09m19s
-1930-Apr-01	19:01:46	44735	3442	-48605	8	Tm	nn	-0.0247	1.0759	4S	84E	89	246	06m43s
-1930-Sep-25	07:57:43	44723	3440	-48599	13	A	nn	0.0317	0.9374	8N	113W	88	233	07m55s
-1929-Mar-22	10:42:28	44712	3438	-48593	18	T	p-	-0.7835	1.0303	55S	127W	38	164	02m13s

-1929-Sep-14	13:20:25	44700	3436	-48587	23	A	p-	0.7327	0.9846	55N	173W	43	80	01m14s
-1928-Feb-10	06:10:38	44690	3435	-48582	-10	P	-t	1.2456	0.5419	69N	106W	0		
-1928-Aug-04	16:55:22	44679	3433	-48576	-5	P	-t	-1.2215	0.5935	68S	99E	0		
-1928-Sep-03	01:53:05	44677	3432	-48575	33	P	t-	1.3840	0.2861	70N	112E	0		
-1927-Jan-29	06:14:45	44667	3431	-48570	0	A	-p	0.5490	0.9274	11N	86W	57	326	10m18s
-1927-Jul-25	09:30:57	44656	3429	-48564	5	T	-p	-0.5247	1.0535	9S	137W	58	208	05m16s
-1926-Jan-18	07:38:50	44644	3427	-48558	10	A	nn	-0.1742	0.9570	34S	105W	80	159	04m50s
-1926-Jul-14	22:43:39	44633	3425	-48552	15	H	nn	0.2218	1.0079	37N	23E	77	28	00m46s
-1925-Jan-07	15:51:43	44621	3423	-48546	20	H	p-	-0.8697	1.0006	83S	91E	29	4	00m02s
-1925-Jul-04	05:06:21	44609	3421	-48540	25	P	t-	1.0197	0.9339	65N	128E	0		
-1925-Nov-28	19:33:14	44600	3419	-48535	-8	P	-t	1.1690	0.6908	62N	122E	0		
-1925-Dec-28	05:59:43	44598	3419	-48534	30	P	t-	-1.5000	0.0673	65S	120E	0		
-1924-May-23	15:20:41	44588	3417	-48529	-3	P	-t	-1.0634	0.8583	62S	170W	0		
-1924-Nov-17	10:14:54	44577	3415	-48523	2	H	-p	0.5280	1.0116	14N	137W	58	47	01m06s
-1923-May-12	20:44:14	44565	3413	-48517	7	H	nn	-0.2535	1.0059	0S	59E	75	21	00m36s
-1923-Nov-06	19:43:22	44554	3411	-48511	12	A	nn	-0.1652	0.9588	20S	63E	80	152	04m14s
-1922-May-02	09:18:54	44542	3409	-48505	17	T	p-	0.5216	1.0573	37N	153W	58	219	04m18s
-1922-Oct-26	21:54:31	44531	3408	-48499	22	A	p-	-0.8767	0.9134	56S	13W	28	672	07m15s
-1921-Mar-23	19:11:34	44521	3406	-48494	-11	P	-t	-1.2714	0.4982	61S	179W	0		
-1921-Apr-22	02:09:36	44519	3406	-48493	27	P	t-	1.2397	0.5600	61N	127W	0		
-1921-Sep-16	03:32:21	44509	3404	-48488	-6	P	-t	1.4437	0.2032	61N	60E	0		
-1921-Oct-15	20:56:02	44507	3404	-48487	32	P	t-	-1.5365	0.0562	61S	44W	0		
-1920-Mar-12	09:36:26	44498	3402	-48482	-1	T	-p	-0.5718	1.0158	40S	114W	55	65	01m16s
-1920-Sep-04	11:10:31	44486	3400	-48476	4	H	-p	0.6722	1.0046	50N	135W	48	21	00m21s
-1919-Mar-01	17:21:26	44475	3398	-48470	9	A	nn	0.1832	0.9619	4S	105E	79	140	04m17s
-1919-Aug-25	01:17:33	44463	3396	-48464	14	T	nn	-0.0572	1.0556	14N	15W	87	184	04m49s
-1918-Feb-18	18:28:54	44452	3394	-48458	19	A	p-	0.9314	0.9255	46N	62E	21	756	07m30s
-1918-Aug-14	17:44:46	44440	3392	-48452	24	T	p-	-0.7597	1.0510	27S	83E	40	257	04m21s
-1917-Jan-09	04:05:15	44430	3391	-48447	-9	P	-t	-1.2693	0.5018	65S	110E	0		
-1917-Jul-05	20:43:03	44419	3389	-48441	-4	P	-t	1.1717	0.6766	66N	136W	0		
-1917-Aug-04	07:50:32	44417	3388	-48440	34	Pb	t-	-1.5250	0.0344	64S	149W	0		
-1917-Dec-29	14:12:39	44407	3387	-48435	1	T	-p	-0.5139	1.0197	55S	155E	59	79	01m31s
-1916-Jun-24	01:11:18	44396	3385	-48429	6	A	-p	0.4409	0.9519	49N	16W	64	197	04m53s

-1916-Dec-18	05:13:35	44384	3383	-48423	11	T	n-	0.1748	1.0488	13S	73W	80	165	04m39s
-1915-Jun-13	01:41:03	44373	3381	-48417	16	A	p-	-0.3195	0.9518	3N	21W	71	186	06m40s
-1915-Dec-07	20:35:03	44361	3379	-48411	21	T	p-	0.8567	1.0182	38N	62E	31	121	01m36s
-1914-Jun-02	05:36:02	44350	3377	-48405	26	P	t-	-1.0669	0.8638	69S	55W	0		
-1914-Oct-28	15:38:57	44340	3375	-48400	-7	P	-t	-1.3215	0.4126	71S	15E	0		
-1913-Apr-23	09:21:36	44328	3373	-48394	-2	T	-p	0.7852	1.0630	54N	160W	38	332	04m19s
-1913-Oct-17	16:14:57	44317	3371	-48388	3	A	-p	-0.6726	0.9145	43S	103E	47	436	09m09s
-1912-Apr-12	02:32:56	44305	3369	-48382	8	T	nn	0.0431	1.0769	4N	33W	88	249	06m48s
-1912-Oct-05	15:52:56	44294	3368	-48376	13	A	nn	0.0182	0.9371	2N	126E	89	234	07m55s
-1911-Apr-01	18:04:43	44282	3366	-48370	18	T	p-	-0.7212	1.0307	46S	114E	44	148	02m26s
-1911-Sep-24	21:33:20	44271	3364	-48364	23	A	p-	0.7145	0.9854	49N	60E	44	73	01m14s
-1910-Feb-20	13:23:01	44261	3362	-48359	-10	P	-t	1.2954	0.4569	70N	132E	0		
-1910-Mar-22	03:40:18	44259	3362	-48358	28	Pb	t-	-1.5388	0.0265	71S	62E	0		
-1910-Aug-16	00:58:37	44250	3360	-48353	-5	P	-t	-1.2602	0.5189	69S	35W	0		
-1910-Sep-14	10:16:08	44248	3360	-48352	33	P	t-	1.3601	0.3310	71N	28W	0		
-1909-Feb-09	13:29:40	44238	3358	-48347	0	A	-p	0.5892	0.9307	16N	162E	54	320	09m28s
-1909-Aug-05	17:19:53	44227	3356	-48341	5	T	-p	-0.5745	1.0475	13S	102E	55	193	04m38s
-1908-Jan-29	15:21:30	44215	3354	-48335	10	A	nn	-0.1449	0.9628	30S	139E	81	136	04m13s
-1908-Jul-25	06:02:47	44204	3352	-48329	15	H	nn	0.1636	1.0017	33N	87W	80	6	00m10s
-1907-Jan-18	00:07:46	44192	3350	-48323	20	H	p-	-0.8488	1.0071	82S	5E	32	47	00m27s
-1907-Jul-14	11:49:53	44181	3348	-48317	25	A	t-	0.9508	0.9452	83N	36E	17	675	03m30s
-1907-Dec-09	04:24:49	44171	3347	-48312	-8	P	-t	1.1711	0.6869	63N	22W	0		
-1906-Jan-07	14:36:19	44169	3346	-48311	30	P	t-	-1.4866	0.0910	66S	22W	0		
-1906-Jun-03	21:44:59	44160	3345	-48306	-3	P	-t	-1.1467	0.7144	62S	83E	0		
-1906-Nov-28	18:58:12	44148	3343	-48300	2	H	-p	0.5293	1.0095	12N	89E	58	38	00m56s
-1905-May-24	03:35:56	44137	3341	-48294	7	H	-n	-0.3332	1.0090	2S	45W	71	33	00m56s
-1905-Nov-18	04:05:35	44125	3339	-48288	12	A	nn	-0.1656	0.9559	24S	64W	80	163	04m35s
-1904-May-12	16:34:55	44114	3337	-48282	17	T	p-	0.4443	1.0613	37N	99E	63	223	04m39s
-1904-Nov-06	05:55:25	44102	3335	-48276	22	A	p-	-0.8731	0.9118	59S	138W	29	681	07m10s
-1903-Apr-03	02:45:12	44092	3334	-48271	-11	P	-t	-1.3367	0.3728	61S	57E	0		
-1903-May-02	09:34:35	44091	3333	-48270	27	P	t-	1.1683	0.6989	61N	112E	0		
-1903-Sep-26	11:27:19	44081	3332	-48265	-6	P	-t	1.4582	0.1784	61N	69W	0		
-1903-Oct-26	04:57:10	44079	3331	-48264	32	P	t-	-1.5279	0.0706	61S	175W	0		

-1902-Mar-23	16:57:03	44069	3330	-48259	-1	T	-p	-0.6368	1.0140	39S	136E	50	61	01m07s
-1902-Sep-15	19:22:37	44058	3328	-48253	4	H	-p	0.6922	1.0044	47N	101E	46	21	00m20s
-1901-Mar-13	00:22:35	44046	3326	-48247	9	Am	nn	0.1219	0.9623	4S	1W	83	137	04m09s
-1901-Sep-05	09:35:09	44035	3324	-48241	14	T	nn	-0.0281	1.0537	12N	140W	88	178	04m33s
-1900-Mar-01	01:24:19	44023	3322	-48235	19	A	p-	0.8750	0.9302	41N	43W	29	523	07m09s
-1900-Aug-25	01:52:04	44012	3320	-48229	24	T	p-	-0.7252	1.0467	26S	42W	43	222	03m56s

19TH CENTURY BCE

In the 19th century BCE the total number of solar eclipses was 251 solar eclipses: 91 partial solar eclipses, 80 annular solar eclipses (80 central annular solar eclipses with two limits, 0 central annular solar eclipses with one limit, 0 non-central annular solar eclipses with one limit), 63 total solar eclipses (62 central total solar eclipses with two limits, 0 central total solar eclipses with one limit, 1 non-central total solar eclipses with one limit), 17 hybrid solar eclipses.

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°	°	ALT	WIDTH	DUR.
	GREATEST		S									°	km	
	ECLIPSE													
-1899-Jan-19	12:02:16	44002	3318	-48224	-9	P	-t	-1.2870	0.4708	64S	21W	0		
-1899-Jul-16	03:47:13	43991	3316	-48218	-4	P	-t	1.2400	0.5539	65N	106E	0		
-1899-Aug-14	15:30:53	43989	3316	-48217	34	P	t-	-1.4865	0.1075	63S	85E	0		
-1898-Jan-08	22:40:05	43980	3315	-48212	1	T	-p	-0.5259	1.0248	55S	32E	58	99	01m53s
-1898-Jul-05	07:44:23	43968	3313	-48206	6	A	-p	0.5187	0.9476	55N	111W	58	226	05m02s
-1898-Dec-29	13:56:28	43956	3311	-48200	11	T	n-	0.1666	1.0512	14S	155E	80	172	04m51s

-1897-Jun-24	08:08:14	43945	3309	-48194	16	A	nn	-0.2370	0.9519	9N	121W	76	181	06m36s
-1897-Dec-19	05:18:01	43933	3307	-48188	21	T	p-	0.8560	1.0176	36N	74W	31	117	01m35s
-1896-Jun-12	12:23:53	43922	3305	-48182	26	A	t-	-0.9851	0.9822	59S	175W	9	403	01m29s
-1896-Nov-07	23:53:41	43912	3303	-48177	-7	P	-t	-1.3252	0.4066	71S	124W	0		
-1895-May-03	16:42:53	43901	3301	-48171	-2	T	-p	0.8566	1.0640	64N	77E	31	407	04m00s
-1895-Oct-28	00:11:54	43890	3299	-48165	3	A	-p	-0.6781	0.9130	48S	19W	47	449	08m57s
-1894-Apr-23	09:59:39	43878	3298	-48159	8	T	nn	0.1143	1.0770	12N	149W	83	251	06m45s
-1894-Oct-16	23:55:08	43867	3296	-48153	13	A	nn	0.0099	0.9375	3S	3E	89	232	07m51s
-1893-Apr-13	01:21:19	43855	3294	-48147	18	T	p-	-0.6553	1.0302	37S	2W	49	134	02m36s
-1893-Oct-06	05:53:07	43844	3292	-48141	23	A	p-	0.7012	0.9865	43N	69W	45	67	01m11s
-1892-Mar-02	20:26:15	43834	3290	-48136	-10	P	-t	1.3514	0.3610	71N	12E	0		
-1892-Apr-01	10:34:23	43832	3290	-48135	28	P	t-	-1.4764	0.1369	72S	58W	0		
-1892-Aug-26	09:10:00	43823	3288	-48130	-5	P	-t	-1.2925	0.4572	70S	172W	0		
-1892-Sep-24	18:46:36	43821	3288	-48129	33	P	t-	1.3421	0.3649	71N	172W	0		
-1891-Feb-19	20:34:15	43811	3286	-48124	0	A	-p	0.6380	0.9340	22N	51E	50	318	08m31s
-1891-Aug-16	01:16:06	43800	3284	-48118	5	T	-p	-0.6175	1.0412	19S	22W	52	175	03m57s
-1890-Feb-08	22:54:52	43788	3282	-48112	10	A	nn	-0.1070	0.9690	26S	25E	84	112	03m32s
-1890-Aug-05	13:29:31	43777	3281	-48106	15	Am	nn	0.1126	0.9952	28N	161E	83	17	00m30s
-1889-Jan-29	08:14:50	43765	3279	-48100	20	T	p-	-0.8199	1.0140	77S	101W	35	85	00m54s
-1889-Jul-25	18:41:36	43754	3277	-48094	25	A	p-	0.8890	0.9427	86N	90E	27	470	04m01s
-1889-Dec-20	13:12:11	43744	3275	-48089	-8	P	-t	1.1767	0.6766	64N	165W	0		
-1888-Jan-18	23:05:41	43742	3275	-48088	30	P	t-	-1.4675	0.1255	67S	161W	0		
-1888-Jun-14	04:12:50	43733	3273	-48083	-3	P	-t	-1.2273	0.5748	63S	25W	0		
-1888-Dec-09	03:39:30	43721	3271	-48077	2	H	-p	0.5317	1.0079	10N	44W	58	32	00m48s
-1887-Jun-03	10:29:21	43710	3269	-48071	7	H	-p	-0.4123	1.0115	4S	150W	66	43	01m13s
-1887-Nov-28	12:26:54	43699	3267	-48065	12	Am	nn	-0.1657	0.9537	27S	170E	80	171	04m54s
-1886-May-23	23:50:33	43687	3265	-48059	17	T	p-	0.3660	1.0644	36N	8W	68	226	04m59s
-1886-Nov-17	13:58:19	43676	3264	-48053	22	A	p-	-0.8713	0.9109	64S	96E	29	689	07m03s
-1885-Apr-14	10:13:17	43666	3262	-48048	-11	P	-t	-1.4062	0.2391	61S	65W	0		
-1885-May-13	16:58:00	43664	3262	-48047	27	P	t-	1.0953	0.8408	61N	10W	0		
-1885-Oct-07	19:30:22	43655	3260	-48042	-6	P	-t	1.4671	0.1630	61N	160E	0		
-1885-Nov-06	13:02:15	43653	3260	-48041	32	P	t-	-1.5217	0.0805	61S	54E	0		
-1884-Apr-03	00:11:10	43643	3258	-48036	-1	H3	-p	-0.7062	1.0117	39S	28E	45	56	00m56s

-1884-Sep-26	03:42:56	43632	3256	-48030	4	H	-p	0.7064	1.0045	43N	26W	45	22	00m21s
-1883-Mar-23	07:14:19	43620	3254	-48024	9	A	nn	0.0537	0.9625	3S	105W	87	136	04m04s
-1883-Sep-15	18:00:35	43609	3252	-48018	14	T	nn	-0.0053	1.0518	9N	92E	90	172	04m20s
-1882-Mar-12	08:11:08	43597	3250	-48012	19	A	p-	0.8115	0.9347	38N	145W	36	402	06m41s
-1882-Sep-05	10:07:04	43586	3249	-48006	24	T	p-	-0.6974	1.0423	27S	169W	46	193	03m30s
-1881-Jan-30	19:51:48	43577	3247	-48001	-9	P	-t	-1.3116	0.4272	63S	150W	0		
-1881-Mar-01	09:40:43	43575	3247	-48000	29	Pb	t-	1.5129	0.0790	61N	158E	0		
-1881-Jul-27	10:58:36	43565	3245	-47995	-4	P	-t	1.3014	0.4452	64N	13W	0		
-1881-Aug-25	23:19:16	43563	3245	-47994	34	P	t-	-1.4551	0.1668	62S	43W	0		
-1880-Jan-20	07:00:57	43554	3243	-47989	1	T	-p	-0.5442	1.0301	55S	89W	57	121	02m13s
-1880-Jul-15	14:23:19	43542	3241	-47983	6	A	-p	0.5910	0.9430	60N	154E	54	262	05m12s
-1879-Jan-08	22:33:00	43531	3239	-47977	11	T	n-	0.1530	1.0539	15S	24E	81	180	05m01s
-1879-Jul-04	14:42:12	43519	3237	-47971	16	A	nn	-0.1593	0.9516	15N	139E	81	179	06m28s
-1879-Dec-29	13:53:17	43508	3235	-47965	21	T	p-	0.8496	1.0175	35N	152E	32	114	01m36s
-1878-Jun-23	19:18:27	43497	3234	-47959	26	A	t-	-0.9075	0.9881	43S	71E	24	101	01m09s
-1878-Nov-19	08:08:09	43487	3232	-47954	-7	P	-t	-1.3285	0.4013	70S	97E	0		
-1877-May-15	00:03:30	43476	3230	-47948	-2	T	-t	0.9288	1.0633	75N	60W	21	570	03m33s
-1877-Nov-08	08:11:19	43464	3228	-47942	3	A	-p	-0.6816	0.9122	53S	141W	47	457	08m43s
-1876-May-03	17:22:42	43453	3226	-47936	8	T	-n	0.1885	1.0762	21N	96E	79	251	06m34s
-1876-Oct-27	08:03:58	43441	3224	-47930	13	A	nn	0.0064	0.9384	7S	122W	90	229	07m43s
-1875-Apr-23	08:29:23	43430	3222	-47924	18	T	p-	-0.5830	1.0291	28S	115W	54	120	02m42s
-1875-Oct-16	14:21:19	43419	3221	-47918	23	A	p-	0.6942	0.9877	39N	160E	46	60	01m07s
-1874-Mar-14	03:18:05	43409	3219	-47913	-10	P	-t	1.4157	0.2506	71N	106W	0		
-1874-Apr-12	17:18:51	43407	3219	-47912	28	P	t-	-1.4066	0.2599	72S	174W	0		
-1874-Sep-06	17:29:56	43398	3217	-47907	-5	P	-t	-1.3182	0.4085	70S	49E	0		
-1874-Oct-06	03:24:39	43396	3217	-47906	33	P	t-	1.3301	0.3875	72N	43E	0		
-1873-Mar-03	03:30:29	43386	3215	-47901	0	A	-p	0.6938	0.9372	30N	59W	46	321	07m32s
-1873-Aug-27	09:20:05	43375	3213	-47895	5	T	-p	-0.6536	1.0348	24S	147W	49	154	03m15s
-1872-Feb-20	06:22:36	43363	3211	-47889	10	A	nn	-0.0635	0.9754	20S	89W	86	88	02m49s
-1872-Aug-15	21:01:22	43352	3209	-47883	15	A	nn	0.0670	0.9887	23N	47E	86	40	01m14s
-1871-Feb-08	16:16:29	43341	3207	-47877	20	T	p-	-0.7859	1.0210	70S	141E	38	117	01m24s
-1871-Aug-05	01:39:26	43329	3206	-47871	25	A	p-	0.8329	0.9393	77N	5W	33	411	04m37s
-1871-Dec-30	21:54:01	43320	3204	-47866	-8	P	-t	1.1867	0.6578	65N	53E	0		

-1870-Jan-29	07:27:21	43318	3204	-47865	30	P	t-	-1.4426	0.1716	68S	60E	0		
-1870-Jun-25	10:47:16	43308	3202	-47860	-3	P	-t	-1.3027	0.4439	64S	136W	0		
-1870-Dec-20	12:15:25	43297	3200	-47854	2	H	-p	0.5377	1.0067	9N	176W	57	27	00m42s
-1869-Jun-14	17:28:58	43286	3198	-47848	7	H	-p	-0.4872	1.0133	7S	103E	61	52	01m26s
-1869-Dec-09	20:43:12	43274	3196	-47842	12	A	nn	-0.1626	0.9521	30S	45E	80	178	05m11s
-1868-Jun-03	07:09:47	43263	3194	-47836	17	T	n-	0.2903	1.0667	35N	117W	73	227	05m17s
-1868-Nov-27	21:59:22	43251	3193	-47830	22	A	p-	-0.8681	0.9107	68S	28W	29	687	06m55s
-1867-Apr-24	17:35:27	43242	3191	-47825	-11	Pe	-t	-1.4799	0.0978	61S	174E	0		
-1867-May-24	00:20:04	43240	3191	-47824	27	P	t-	1.0215	0.9840	62N	131W	0		
-1867-Oct-18	03:41:01	43231	3189	-47819	-6	P	-t	1.4706	0.1567	61N	27E	0		
-1867-Nov-16	21:09:34	43229	3189	-47818	32	P	t-	-1.5168	0.0879	62S	79W	0		
-1866-Apr-14	07:16:39	43219	3187	-47813	-1	H	-p	-0.7815	1.0084	41S	78W	38	45	00m41s
-1866-Oct-07	12:11:21	43208	3185	-47807	4	H	-p	0.7145	1.0050	39N	157W	44	24	00m24s
-1865-Apr-03	13:57:01	43196	3183	-47801	9	A	nn	-0.0211	0.9622	3S	153E	89	137	04m04s
-1865-Sep-27	02:34:53	43185	3182	-47795	14	T	nn	0.0100	1.0500	6N	39W	89	166	04m09s
-1864-Mar-22	14:49:30	43174	3180	-47789	19	A	p-	0.7407	0.9389	35N	115E	42	326	06m12s
-1864-Sep-15	18:29:36	43162	3178	-47783	24	T	p-	-0.6765	1.0377	28S	62E	47	168	03m03s
-1863-Feb-10	03:34:09	43153	3176	-47778	-9	P	-t	-1.3427	0.3714	63S	83E	0		
-1863-Mar-11	16:44:15	43151	3176	-47777	29	P	t-	1.4513	0.1841	61N	41E	0		
-1863-Aug-06	18:16:03	43141	3174	-47772	-4	P	-t	1.3567	0.3484	63N	134W	0		
-1863-Sep-05	07:15:21	43139	3174	-47771	34	P	t-	-1.4305	0.2131	61S	173W	0		
-1862-Jan-30	15:14:00	43130	3172	-47766	1	T	-p	-0.5696	1.0355	54S	152E	55	145	02m34s
-1862-Jul-26	21:09:38	43119	3170	-47760	6	A	-p	0.6568	0.9383	62N	60E	49	304	05m24s
-1861-Jan-20	07:02:56	43107	3169	-47754	11	T	n-	0.1336	1.0568	16S	104W	82	189	05m11s
-1861-Jul-15	21:23:33	43096	3167	-47748	16	A	nn	-0.0872	0.9510	19N	37E	85	180	06m18s
-1860-Jan-09	22:22:54	43084	3165	-47742	21	T	p-	0.8392	1.0178	33N	19E	33	112	01m38s
-1860-Jul-04	02:19:40	43073	3163	-47736	26	A	t-	-0.8340	0.9917	33S	40W	33	53	00m52s
-1860-Nov-29	16:21:23	43064	3161	-47731	-7	P	-t	-1.3319	0.3958	69S	41W	0		
-1859-May-25	07:23:45	43052	3159	-47725	-2	T+	-t	1.0014	1.0205	70N	101E	0		
-1859-Jun-23	14:35:35	43050	3159	-47724	36	Pb	t-	-1.5240	0.0178	67S	142E	0		
-1859-Nov-18	16:12:09	43041	3158	-47719	3	A	-p	-0.6838	0.9121	57S	98E	47	460	08m27s
-1858-May-15	00:44:14	43030	3156	-47713	8	T	-n	0.2635	1.0746	29N	18W	75	251	06m15s
-1858-Nov-07	16:15:24	43018	3154	-47707	13	A	nn	0.0044	0.9400	12S	113E	90	222	07m30s

-1857-May-04	15:34:54	43007	3152	-47701	18	T	p-	-0.5095	1.0272	19S	133E	59	107	02m41s
-1857-Oct-27	22:54:13	42996	3150	-47695	23	A	p-	0.6902	0.9895	34N	28E	46	51	00m59s
-1856-Mar-24	10:01:45	42986	3148	-47690	-10	P	-t	1.4854	0.1309	71N	137E	0		
-1856-Apr-22	23:57:53	42984	3148	-47689	28	P	t-	-1.3330	0.3895	71S	70E	0		
-1856-Sep-17	01:57:15	42975	3147	-47684	-5	P	-t	-1.3380	0.3711	71S	93W	0		
-1856-Oct-16	12:08:09	42973	3146	-47683	33	P	t-	1.3224	0.4019	72N	104W	0		
-1855-Mar-13	10:18:10	42963	3145	-47678	0	A	-p	0.7566	0.9402	38N	167W	41	335	06m33s
-1855-Sep-06	17:32:02	42952	3143	-47672	5	T	-p	-0.6821	1.0286	29S	85E	47	132	02m35s
-1854-Mar-02	13:40:34	42941	3141	-47666	10	A	nn	-0.0113	0.9817	14S	159E	89	65	02m05s
-1854-Aug-27	04:42:31	42929	3139	-47660	15	A	nn	0.0303	0.9822	18N	71W	88	63	01m59s
-1853-Feb-20	00:09:24	42918	3137	-47654	20	T	p-	-0.7441	1.0282	63S	21E	42	143	01m57s
-1853-Aug-16	08:45:52	42907	3135	-47648	25	A	p-	0.7842	0.9356	70N	112W	38	389	05m17s
-1852-Jan-11	06:29:05	42897	3134	-47643	-8	P	-t	1.2022	0.6287	66N	88W	0		
-1852-Feb-09	15:40:56	42895	3133	-47642	30	P	t-	-1.4113	0.2302	69S	76W	0		
-1852-Jul-05	17:28:36	42886	3132	-47637	-3	P	-t	-1.3727	0.3223	65S	112E	0		
-1852-Aug-04	08:40:47	42884	3131	-47636	35	P	t-	1.5011	0.1088	68N	36E	0		
-1852-Dec-30	20:45:27	42874	3130	-47631	2	H	-p	0.5481	1.0059	9N	53E	57	24	00m38s
-1851-Jun-25	00:32:42	42863	3128	-47625	7	H2	-p	-0.5595	1.0145	10S	5W	56	60	01m34s
-1851-Dec-20	04:55:28	42852	3126	-47619	12	A	nn	-0.1569	0.9511	32S	78W	81	181	05m24s
-1850-Jun-14	14:31:48	42840	3124	-47613	17	T	n-	0.2162	1.0680	34N	134E	77	227	05m33s
-1850-Dec-09	05:57:55	42829	3122	-47607	22	A	p-	-0.8630	0.9113	72S	149W	30	673	06m47s
-1849-Jun-04	07:43:42	42818	3120	-47601	27	T	t-	0.9490	1.0660	71N	148E	18	700	03m24s
-1849-Oct-29	11:57:52	42808	3119	-47596	-6	P	-t	1.4696	0.1577	61N	108W	0		
-1849-Nov-28	05:18:13	42806	3119	-47595	32	P	t-	-1.5124	0.0942	62S	148E	0		
-1848-Apr-24	14:16:44	42797	3117	-47590	-1	H	-t	-0.8603	1.0042	44S	179E	30	28	00m20s
-1848-Oct-17	20:46:17	42786	3115	-47584	4	H	-p	0.7181	1.0059	36N	71E	44	29	00m29s
-1847-Apr-13	20:32:53	42774	3113	-47578	9	A	nn	-0.1007	0.9617	2S	54E	84	139	04m09s
-1847-Oct-07	11:15:24	42763	3111	-47572	14	T	nn	0.0206	1.0485	2N	171W	89	161	04m01s
-1846-Apr-02	21:20:54	42752	3110	-47566	19	A	p-	0.6635	0.9428	34N	17E	48	275	05m46s
-1846-Sep-27	02:59:14	42740	3108	-47560	24	T	p-	-0.6618	1.0333	31S	69W	48	147	02m38s
-1845-Feb-21	11:09:35	42731	3106	-47555	-9	P	-t	-1.3806	0.3028	62S	42W	0		
-1845-Mar-22	23:42:49	42729	3106	-47554	29	P	t-	1.3841	0.3005	61N	74W	0		
-1845-Aug-18	01:40:25	42720	3104	-47549	-4	P	-t	1.4055	0.2642	62N	104E	0		

-1845-Sep-16	15:17:36	42718	3104	-47548	34	P	t-	-1.4114	0.2490	61S	56E	0		
-1844-Feb-10	23:19:53	42708	3102	-47543	1	T	-p	-0.6020	1.0408	53S	33E	53	170	02m53s
-1844-Aug-06	04:03:52	42697	3100	-47537	6	A	-p	0.7158	0.9335	63N	35W	44	354	05m37s
-1843-Jan-30	15:23:46	42686	3099	-47531	11	T	n-	0.1066	1.0598	16S	130E	84	198	05m19s
-1843-Jul-26	04:14:08	42674	3097	-47525	16	A	nn	-0.0218	0.9502	22N	66W	89	183	06m09s
-1842-Jan-20	06:42:50	42663	3095	-47519	21	T	p-	0.8214	1.0185	31N	111W	35	110	01m43s
-1842-Jul-15	09:30:13	42652	3093	-47513	26	A	p-	-0.7670	0.9942	26S	152W	40	32	00m37s
-1842-Dec-11	00:29:23	42642	3091	-47508	-7	P	-t	-1.3390	0.3839	68S	176W	0		
-1841-Jun-05	14:46:50	42631	3090	-47502	-2	P	-t	1.0723	0.8836	69N	24W	0		
-1841-Jul-04	22:03:23	42629	3089	-47501	36	P	t-	-1.4566	0.1458	66S	17E	0		
-1841-Nov-30	00:12:43	42620	3088	-47496	3	A	-p	-0.6865	0.9127	61S	21W	46	459	08m08s
-1840-May-25	08:03:44	42608	3086	-47490	8	T	-n	0.3400	1.0720	37N	131W	70	249	05m50s
-1840-Nov-18	00:30:42	42597	3084	-47484	13	A	nn	0.0048	0.9422	15S	12W	90	214	07m13s
-1839-May-14	22:35:13	42586	3082	-47478	18	T	p-	-0.4321	1.0246	11S	23E	64	92	02m33s
-1839-Nov-07	07:31:54	42575	3080	-47472	23	A	p-	0.6895	0.9917	31N	105W	46	40	00m48s
-1838-May-04	06:30:38	42563	3078	-47466	28	P	t-	-1.2547	0.5270	71S	43W	0		
-1838-Sep-28	10:32:47	42554	3077	-47461	-5	P	-t	-1.3513	0.3461	71S	122E	0		
-1838-Oct-27	20:57:15	42552	3076	-47460	33	P	t-	1.3191	0.4082	71N	108E	0		
-1837-Mar-24	16:59:52	42543	3075	-47455	0	A	-p	0.8244	0.9428	47N	84E	34	369	05m39s
-1837-Sep-18	01:50:18	42531	3073	-47449	5	T	-p	-0.7049	1.0226	34S	44W	45	108	01m58s
-1836-Mar-12	20:54:17	42520	3071	-47443	10	A	nn	0.0456	0.9880	7S	47E	87	42	01m22s
-1836-Sep-06	12:29:51	42509	3069	-47437	15	A	nn	-0.0003	0.9759	13N	170E	90	86	02m45s
-1835-Mar-02	07:55:41	42497	3067	-47431	20	T	p-	-0.6960	1.0353	55S	99W	46	165	02m34s
-1835-Aug-26	16:00:21	42486	3066	-47425	25	A	p-	0.7423	0.9317	62N	137E	42	381	06m00s
-1834-Jan-21	14:56:50	42477	3064	-47420	-8	P	-t	1.2237	0.5881	67N	132E	0		
-1834-Feb-19	23:46:43	42475	3064	-47419	30	P	t-	-1.3736	0.3014	70S	148E	0		
-1834-Jul-17	00:19:27	42465	3062	-47414	-3	P	-t	-1.4357	0.2129	66S	2W	0		
-1834-Aug-15	15:45:02	42464	3062	-47413	35	P	t-	1.4495	0.1968	69N	84W	0		
-1833-Jan-11	05:06:58	42454	3060	-47408	2	H	-p	0.5650	1.0052	11N	75W	56	22	00m34s
-1833-Jul-06	07:45:51	42443	3058	-47402	7	T	-p	-0.6251	1.0151	15S	116W	51	66	01m37s
-1833-Dec-31	13:00:22	42431	3057	-47396	12	A	nn	-0.1459	0.9506	32S	162E	81	183	05m35s
-1832-Jun-24	21:58:43	42420	3055	-47390	17	T	n-	0.1458	1.0685	32N	23E	81	226	05m46s
-1832-Dec-19	13:51:38	42409	3053	-47384	22	A	p-	-0.8542	0.9126	76S	97E	31	646	06m40s

-1831-Jun-14	15:09:16	42398	3051	-47378	27	T	p-	0.8786	1.0666	74N	64E	28	460	03m40s
-1831-Nov-08	20:18:18	42388	3049	-47373	-6	P	-t	1.4669	0.1617	61N	116E	0		
-1831-Dec-08	13:24:15	42386	3049	-47372	32	P	t-	-1.5053	0.1049	63S	16E	0		
-1830-May-05	21:11:05	42377	3048	-47367	-1	A	-t	-0.9426	0.9984	50S	79E	19	17	00m08s
-1830-Oct-29	05:26:45	42366	3046	-47361	4	H	-p	0.7178	1.0074	32N	64W	44	36	00m38s
-1829-Apr-25	03:02:23	42354	3044	-47355	9	A	nn	-0.1852	0.9607	3S	44W	79	145	04m21s
-1829-Oct-18	20:01:31	42343	3042	-47349	14	T	nn	0.0267	1.0472	3S	55E	88	157	03m56s
-1828-Apr-13	03:46:38	42332	3040	-47343	19	A	p-	0.5812	0.9464	33N	79W	54	237	05m23s
-1828-Oct-07	11:35:28	42321	3038	-47337	24	T	p-	-0.6529	1.0290	34S	159E	49	127	02m15s
-1827-Mar-03	18:36:30	42311	3037	-47332	-9	P	-t	-1.4259	0.2197	61S	164W	0		
-1827-Apr-02	06:34:00	42309	3036	-47331	29	P	t-	1.3096	0.4310	61N	173E	0		
-1827-Aug-28	09:12:36	42300	3035	-47326	-4	P	-t	1.4469	0.1938	62N	20W	0		
-1827-Sep-26	23:27:31	42298	3034	-47325	34	P	t-	-1.3991	0.2722	61S	77W	0		
-1826-Feb-21	07:17:50	42289	3033	-47320	1	T	-p	-0.6414	1.0459	51S	84W	50	198	03m11s
-1826-Aug-17	11:07:10	42278	3031	-47314	6	A	-p	0.7670	0.9289	63N	134W	40	413	05m54s
-1825-Feb-10	23:37:06	42266	3029	-47308	11	T	nn	0.0734	1.0627	15S	5E	86	206	05m25s
-1825-Aug-06	11:14:51	42255	3027	-47302	16	A	nn	0.0358	0.9491	23N	172W	88	187	06m01s
-1824-Jan-31	14:55:37	42244	3026	-47296	21	T	p-	0.7983	1.0194	30N	121E	37	109	01m47s
-1824-Jul-25	16:48:26	42233	3024	-47290	26	A	p-	-0.7051	0.9960	21S	94E	45	20	00m26s
-1824-Dec-21	08:33:33	42223	3022	-47285	-7	P	-t	-1.3485	0.3680	67S	50E	0		
-1823-Jun-15	22:12:42	42212	3020	-47279	-2	P	-t	1.1412	0.7500	68N	148W	0		
-1823-Jul-15	05:37:42	42210	3020	-47278	36	P	t-	-1.3936	0.2656	65S	108W	0		
-1823-Dec-10	08:10:00	42201	3018	-47273	3	A	-p	-0.6918	0.9140	65S	136W	46	456	07m48s
-1822-Jun-05	15:24:47	42189	3017	-47267	8	T	-p	0.4147	1.0685	44N	117E	65	246	05m20s
-1822-Nov-29	08:45:20	42178	3015	-47261	13	A	nn	0.0036	0.9451	19S	137W	90	202	06m49s
-1821-May-26	05:35:17	42167	3013	-47255	18	T	n-	-0.3555	1.0212	3S	87W	69	77	02m18s
-1821-Nov-18	16:10:15	42156	3011	-47249	23	A	p-	0.6887	0.9945	27N	121E	46	26	00m33s
-1820-May-14	13:01:08	42144	3009	-47243	28	P	t-	-1.1748	0.6666	70S	156W	0		
-1820-Oct-08	19:14:22	42135	3008	-47238	-5	P	-t	-1.3601	0.3300	72S	24W	0		
-1820-Nov-07	05:48:49	42133	3007	-47237	33	P	t-	1.3178	0.4106	71N	40W	0		
-1819-Apr-03	23:33:29	42124	3006	-47232	0	A	-p	0.8990	0.9446	58N	28W	26	465	04m48s
-1819-Sep-28	10:16:15	42113	3004	-47226	5	T	-p	-0.7207	1.0171	40S	176W	44	84	01m26s
-1818-Mar-24	04:00:22	42101	3002	-47220	10	Am	nn	0.1098	0.9940	1N	64W	84	21	00m40s

-1818-Sep-17	20:25:41	42090	3000	-47214	15	A	nn	-0.0231	0.9700	7N	49E	89	108	03m28s
-1817-Mar-13	15:34:32	42079	2998	-47208	20	T	p-	-0.6408	1.0421	47S	141E	50	183	03m14s
-1817-Sep-06	23:24:53	42068	2997	-47202	25	A	p-	0.7088	0.9279	56N	23E	45	383	06m45s
-1816-Feb-01	23:16:28	42058	2995	-47197	-8	P	-t	1.2518	0.5349	68N	6W	0		
-1816-Mar-02	07:44:16	42056	2995	-47196	30	P	t-	-1.3293	0.3859	70S	14E	0		
-1816-Jul-27	07:18:40	42047	2993	-47191	-3	P	-t	-1.4924	0.1145	67S	120W	0		
-1816-Aug-25	22:59:17	42045	2993	-47190	35	P	t-	1.4052	0.2721	70N	154E	0		
-1815-Jan-21	13:20:58	42036	2991	-47185	2	H	-p	0.5873	1.0048	13N	158E	54	21	00m31s
-1815-Jul-16	15:06:03	42025	2989	-47179	7	T	-p	-0.6854	1.0151	20S	130E	47	71	01m35s
-1814-Jan-10	20:56:59	42013	2988	-47173	12	A	nn	-0.1289	0.9506	31S	43E	82	183	05m43s
-1814-Jul-06	05:31:15	42002	2986	-47167	17	T	nn	0.0798	1.0683	29N	90W	85	223	05m56s
-1814-Dec-30	21:40:22	41991	2984	-47161	22	A	p-	-0.8416	0.9146	79S	7W	32	608	06m34s
-1813-Jun-25	22:37:45	41980	2982	-47155	27	T	p-	0.8108	1.0656	74N	23W	36	369	03m49s
-1813-Nov-20	04:41:01	41970	2981	-47150	-6	P	-t	1.4630	0.1675	62N	20W	0		
-1813-Dec-19	21:28:14	41968	2980	-47149	32	P	t-	-1.4959	0.1193	64S	116W	0		
-1812-May-16	04:02:39	41959	2979	-47144	-1	P	-t	-1.0258	0.9434	61S	6W	0		
-1812-Nov-08	14:10:31	41948	2977	-47138	4	H	-p	0.7157	1.0094	29N	161E	44	46	00m49s
-1811-May-05	09:26:46	41937	2975	-47132	9	A	np	-0.2731	0.9592	3S	141W	74	153	04m39s
-1811-Oct-29	04:51:49	41925	2973	-47126	14	T	nn	0.0295	1.0464	7S	79W	88	155	03m53s
-1810-Apr-24	10:09:07	41914	2971	-47120	19	A	p-	0.4955	0.9495	32N	174W	60	210	05m06s
-1810-Oct-18	20:15:39	41903	2969	-47114	24	T	p-	-0.6479	1.0251	38S	25E	49	110	01m54s
-1809-Mar-15	01:58:09	41894	2968	-47109	-9	P	-t	-1.4763	0.1265	61S	75E	0		
-1809-Apr-13	13:23:27	41892	2968	-47108	29	P	t-	1.2323	0.5679	61N	60E	0		
-1809-Sep-08	16:52:51	41882	2966	-47103	-4	P	-t	1.4808	0.1372	61N	146W	0		
-1809-Oct-08	07:43:01	41881	2966	-47102	34	P	t-	-1.3922	0.2856	61S	149E	0		
-1808-Mar-03	15:08:50	41871	2964	-47097	1	T	-p	-0.6874	1.0507	50S	160E	46	229	03m28s
-1808-Aug-27	18:19:15	41860	2962	-47091	6	A	-p	0.8106	0.9244	61N	123E	36	482	06m12s
-1807-Feb-21	07:41:27	41849	2961	-47085	11	Tm	nn	0.0325	1.0654	14S	117W	88	214	05m31s
-1807-Aug-16	18:26:51	41838	2959	-47079	16	A	nn	0.0851	0.9481	24N	80E	85	192	05m55s
-1806-Feb-10	22:56:40	41826	2957	-47073	21	T	p-	0.7661	1.0204	28N	3W	40	106	01m51s
-1806-Aug-06	00:18:24	41815	2955	-47067	26	A	p-	-0.6516	0.9971	18S	21W	49	13	00m18s
-1805-Jan-01	16:29:52	41806	2954	-47062	-7	P	-t	-1.3642	0.3417	66S	82W	0		
-1805-Jan-31	08:30:29	41804	2953	-47061	31	Pb	t-	1.5528	0.0078	63N	168W	0		

-1805-Jun-27	05:43:02	41795	2952	-47056	-2	P	-t	1.2068	0.6229	67N	86E	0			
-1805-Jul-26	13:20:00	41793	2951	-47055	36	P	t-	-1.3365	0.3744	64S	125E	0			
-1805-Dec-21	16:03:28	41784	2950	-47050	3	A	-p	-0.7005	0.9159	68S	112E	45	451	07m26s	
-1804-Jun-15	22:46:51	41772	2948	-47044	8	T	-p	0.4883	1.0643	51N	7E	61	242	04m47s	
-1804-Dec-09	16:59:41	41761	2946	-47038	13	A	nn	0.0016	0.9487	21S	98E	90	188	06m18s	
-1803-Jun-05	12:32:42	41750	2944	-47032	18	T	nn	-0.2776	1.0171	4N	165E	74	61	01m54s	
-1803-Nov-29	00:50:25	41739	2943	-47026	23	A	p-	0.6886	0.9979	24N	13W	46	10	00m13s	
-1802-May-25	19:29:16	41728	2941	-47020	28	P	t-	-1.0933	0.8083	70S	93E	0			
-1802-Oct-20	04:01:16	41718	2939	-47015	-5	P	-t	-1.3648	0.3215	71S	172W	0			
-1802-Nov-18	14:41:54	41716	2939	-47014	33	P	t-	1.3177	0.4108	70N	172E	0			
-1801-Apr-15	06:04:25	41707	2937	-47009	0	A	-t	0.9760	0.9447	70N	160W	12	988	04m02s	
-1801-Oct-09	18:48:14	41696	2936	-47003	5	H3	-p	-0.7312	1.0120	45S	52E	43	60	00m58s	
-1800-Apr-03	11:03:09	41685	2934	-46997	10	A	nn	0.1778	0.9997	9N	173W	80	1	00m02s	
-1800-Sep-28	04:27:26	41673	2932	-46991	15	A	nn	-0.0401	0.9644	2N	74W	88	129	04m09s	

18TH CENTURY BCE

In the 18th century BCE the total number of solar eclipses was 254 solar eclipses: 95 partial solar eclipses, 74 annular solar eclipses (73 central annular solar eclipses with two limits, 0 central annular solar eclipses with one limit, 1 non-central annular solar eclipses with one limit), 64 total solar eclipses (63 central total solar eclipses with two limits, 0 central total solar eclipses with one limit, 1 non-central total solar eclipses with one limit), 21 hybrid solar eclipses.

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	° .	°	ALT	WIDTH	DUR.
	GREATEST		S									°	km	
ECLIPSE														

-1799-Mar-23	23:08:20	41662	2930	-46985	20	T	p-	-0.5805	1.0485	39S	23E	54	197	03m55s
-1799-Sep-17	06:57:33	41651	2928	-46979	25	A	p-	0.6824	0.9244	49N	93W	47	388	07m32s
-1798-Feb-12	07:27:00	41642	2927	-46974	-8	P	-t	1.2870	0.4679	69N	142W	0		
-1798-Mar-13	15:34:16	41640	2926	-46973	30	P	t-	-1.2790	0.4827	71S	118W	0		
-1798-Aug-07	14:29:35	41631	2925	-46968	-3	Pe	-t	-1.5402	0.0317	68S	120E	0		
-1798-Sep-06	06:24:55	41629	2925	-46967	35	P	t-	1.3693	0.3330	71N	28E	0		
-1797-Feb-01	21:25:10	41620	2923	-46962	2	H	-p	0.6168	1.0043	17N	33E	52	19	00m28s
-1797-Jul-27	22:35:32	41608	2921	-46956	7	T	-p	-0.7389	1.0147	25S	13E	42	75	01m30s
-1796-Jan-22	04:44:00	41597	2919	-46950	12	A	nn	-0.1048	0.9509	29S	74W	84	181	05m49s
-1796-Jul-16	13:10:48	41586	2918	-46944	17	T	nn	0.0195	1.0673	25N	155E	89	220	06m01s
-1795-Jan-10	05:20:06	41575	2916	-46938	22	A	p-	-0.8215	0.9173	79S	98W	34	556	06m29s
-1795-Jul-06	06:10:31	41564	2914	-46932	27	T	p-	0.7467	1.0633	72N	118W	41	313	03m52s
-1795-Nov-30	13:03:40	41554	2912	-46927	-6	P	-t	1.4600	0.1714	63N	156W	0		
-1795-Dec-30	05:26:18	41553	2912	-46926	32	P	t-	-1.4808	0.1429	65S	112E	0		
-1794-May-27	10:52:02	41543	2911	-46921	-1	P	-t	-1.1097	0.7902	62S	119W	0		
-1794-Nov-19	22:55:25	41532	2909	-46915	4	H2	-p	0.7134	1.0120	26N	26E	44	58	01m05s
-1793-May-16	15:48:48	41521	2907	-46909	9	A	-p	-0.3624	0.9571	5S	123E	69	166	05m03s
-1793-Nov-09	13:45:42	41510	2905	-46903	14	Tm	nn	0.0294	1.0461	11S	145E	88	153	03m54s
-1792-May-04	16:27:38	41499	2903	-46897	19	A	p-	0.4060	0.9522	32N	92E	66	190	04m53s
-1792-Oct-29	05:00:50	41487	2901	-46891	24	T	p-	-0.6474	1.0216	43S	109W	49	95	01m36s
-1791-Mar-25	09:13:17	41478	2900	-46886	-9	Pe	-t	-1.5325	0.0216	61S	44W	0		
-1791-Apr-23	20:08:49	41476	2900	-46885	29	P	t-	1.1504	0.7144	61N	52W	0		
-1791-Sep-19	00:41:05	41467	2898	-46880	-4	P	-t	1.5078	0.0931	61N	87E	0		
-1791-Oct-18	16:04:07	41465	2898	-46879	34	P	t-	-1.3902	0.2903	61S	13E	0		
-1790-Mar-14	22:52:24	41456	2896	-46874	1	T	-p	-0.7403	1.0548	49S	45E	42	265	03m42s
-1790-Sep-08	01:41:31	41445	2894	-46868	6	A	-p	0.8460	0.9202	59N	14E	32	558	06m33s
-1789-Mar-04	15:38:54	41434	2893	-46862	11	T	nn	-0.0143	1.0677	13S	123E	89	221	05m36s
-1789-Aug-28	01:48:11	41422	2891	-46856	16	A	nn	0.1275	0.9470	23N	30W	83	196	05m52s
-1788-Feb-22	06:50:18	41411	2889	-46850	21	T	p-	0.7283	1.0213	27N	124W	43	104	01m55s
-1788-Aug-16	07:57:19	41400	2887	-46844	26	A	p-	-0.6043	0.9980	16S	139W	53	9	00m12s
-1787-Jan-12	00:18:19	41391	2886	-46839	-7	P	-t	-1.3853	0.3060	65S	149E	0		
-1787-Feb-10	16:06:52	41389	2885	-46838	31	P	t-	1.5215	0.0623	63N	67E	0		
-1787-Jul-07	13:18:25	41380	2884	-46833	-2	P	-t	1.2684	0.5036	66N	40W	0		

-1787-Aug-05	21:10:34	41378	2884	-46832	36	P	t-	-1.2855	0.4714	63S	4W	0			
-1787-Dec-31	23:50:49	41369	2882	-46827	3	A	-p	-0.7144	0.9183	69S	4E	44	446	07m03s	
-1786-Jun-27	06:13:13	41357	2880	-46821	8	T	-p	0.5577	1.0592	58N	103W	56	235	04m13s	
-1786-Dec-21	01:09:23	41346	2878	-46815	13	Am	nn	-0.0053	0.9530	23S	25W	90	172	05m42s	
-1785-Jun-16	19:33:15	41335	2877	-46809	18	H	nn	-0.2031	1.0124	10N	57E	78	43	01m23s	
-1785-Dec-10	09:28:21	41324	2875	-46803	23	H	p-	0.6858	1.0019	22N	147W	47	9	00m12s	
-1784-Jun-05	01:57:00	41313	2873	-46797	28	A-	t-	-1.0116	0.9493	69S	18W	0			
-1784-Oct-30	12:52:18	41304	2871	-46792	-5	P	-t	-1.3665	0.3186	71S	40E	0			
-1784-Nov-28	23:34:52	41302	2871	-46791	33	P	t-	1.3173	0.4114	69N	24E	0			
-1783-Apr-25	12:30:50	41293	2870	-46786	0	P	-t	1.0571	0.8684	71N	52E	0			
-1783-Oct-20	03:25:16	41281	2868	-46780	5	H	-p	-0.7369	1.0075	49S	81W	42	38	00m35s	
-1782-Apr-14	18:00:48	41270	2866	-46774	10	H	nn	0.2511	1.0049	17N	78E	75	17	00m30s	
-1782-Oct-09	12:36:27	41259	2864	-46768	15	A	nn	-0.0505	0.9594	3S	161E	87	148	04m46s	
-1781-Apr-04	06:36:41	41248	2862	-46762	20	T	p-	-0.5150	1.0545	30S	95W	59	209	04m36s	
-1781-Sep-28	14:38:08	41237	2861	-46756	25	A	p-	0.6625	0.9211	43N	148E	48	395	08m19s	
-1780-Feb-23	15:29:15	41228	2859	-46751	-8	P	-t	1.3290	0.3879	70N	83E	0			
-1780-Mar-23	23:17:19	41226	2859	-46750	30	P	t-	-1.2229	0.5911	71S	111E	0			
-1780-Sep-16	14:00:29	41215	2857	-46744	35	P	t-	1.3407	0.3813	71N	102W	0			
-1779-Feb-12	05:19:03	41205	2855	-46739	2	H	-p	0.6543	1.0038	22N	90W	49	17	00m24s	
-1779-Aug-07	06:14:12	41194	2854	-46733	7	T	-p	-0.7857	1.0139	31S	107W	38	77	01m21s	
-1778-Feb-01	12:21:25	41183	2852	-46727	12	A	nn	-0.0734	0.9516	25S	171E	86	178	05m53s	
-1778-Jul-27	20:57:44	41172	2850	-46721	17	T	nn	-0.0351	1.0658	21N	37E	88	215	06m01s	
-1777-Jan-21	12:52:31	41161	2848	-46715	22	A	p-	-0.7952	0.9205	76S	167E	37	501	06m26s	
-1777-Jul-17	13:49:02	41150	2846	-46709	27	T	p-	0.6878	1.0601	67N	139E	46	273	03m53s	
-1777-Dec-11	21:26:02	41141	2845	-46704	-6	P	-t	1.4580	0.1733	63N	67E	0			
-1776-Jan-10	13:20:21	41139	2845	-46703	32	P	t-	-1.4618	0.1736	66S	18W	0			
-1776-Jun-06	17:40:22	41129	2843	-46698	-1	P	-t	-1.1931	0.6389	63S	127E	0			
-1776-Jul-06	04:06:48	41128	2843	-46697	37	P	t-	1.4719	0.1291	65N	124E	0			
-1776-Nov-30	07:41:08	41118	2841	-46692	4	T	-p	0.7112	1.0151	24N	110W	45	73	01m24s	
-1775-May-26	22:09:39	41107	2840	-46686	9	A	-p	-0.4516	0.9546	7S	26E	63	184	05m34s	
-1775-Nov-19	22:39:41	41096	2838	-46680	14	T	nn	0.0293	1.0462	15S	10E	88	154	03m58s	
-1774-May-15	22:46:59	41085	2836	-46674	19	A	pn	0.3166	0.9543	31N	2W	71	175	04m47s	
-1774-Nov-09	13:47:26	41074	2834	-46668	24	T	p-	-0.6488	1.0186	48S	117E	49	83	01m22s	

-1773-May-05	02:55:03	41063	2832	-46662	29	P	t-	1.0677	0.8637	61N	164W	0		
-1773-Sep-30	08:35:10	41054	2831	-46657	-4	P	-t	1.5293	0.0585	61N	42W	0		
-1773-Oct-30	00:27:23	41052	2831	-46656	34	P	t-	-1.3907	0.2902	61S	123W	0		
-1772-Mar-25	06:30:37	41042	2829	-46651	1	T	-p	-0.7983	1.0583	48S	68W	37	313	03m53s
-1772-Sep-18	09:12:36	41031	2827	-46645	6	A	-p	0.8741	0.9165	56N	99W	29	640	06m57s
-1771-Mar-14	23:26:33	41020	2825	-46639	11	T	nn	-0.0694	1.0696	12S	5E	86	227	05m39s
-1771-Sep-07	09:21:47	41009	2824	-46633	16	A	nn	0.1606	0.9462	20N	145W	81	201	05m50s
-1770-Mar-04	14:32:30	40998	2822	-46627	21	T	p-	0.6817	1.0220	26N	118E	47	100	01m57s
-1770-Aug-27	15:47:57	40987	2820	-46621	26	A	p-	-0.5659	0.9986	16S	101E	55	6	00m08s
-1769-Jan-23	07:56:20	40978	2819	-46616	-7	P	-t	-1.4142	0.2570	64S	23E	0		
-1769-Feb-21	23:31:47	40976	2818	-46615	31	P	t-	1.4818	0.1315	62N	55W	0		
-1769-Jul-18	21:01:06	40967	2817	-46610	-2	P	-t	1.3243	0.3957	65N	167W	0		
-1769-Aug-17	05:11:00	40965	2816	-46609	36	P	t-	-1.2421	0.5536	62S	136W	0		
-1768-Jan-12	07:32:00	40956	2815	-46604	3	A	-p	-0.7336	0.9212	70S	101W	43	441	06m38s
-1768-Jul-07	13:42:10	40945	2813	-46598	8	T	-p	0.6243	1.0535	63N	150E	51	227	03m39s
-1768-Dec-31	09:16:15	40933	2811	-46592	13	A	nn	-0.0154	0.9578	25S	147W	89	154	04m59s
-1767-Jun-27	02:34:28	40922	2810	-46586	18	Hm	nn	-0.1299	1.0070	16N	50W	83	24	00m47s
-1767-Dec-20	18:03:47	40911	2808	-46580	23	H	p-	0.6802	1.0065	20N	80E	47	31	00m41s
-1766-Jun-16	08:26:06	40900	2806	-46574	28	A	t-	-0.9313	0.9509	47S	133W	21	500	05m03s
-1766-Nov-10	21:46:15	40891	2804	-46569	-5	P	-t	-1.3663	0.3193	70S	109W	0		
-1766-Dec-10	08:26:37	40889	2804	-46568	33	P	t-	1.3157	0.4143	68N	122W	0		
-1765-May-06	18:56:45	40880	2803	-46563	0	P	-t	1.1387	0.7280	71N	60W	0		
-1765-Oct-31	12:05:02	40869	2801	-46557	5	H	-p	-0.7399	1.0034	54S	146E	42	18	00m16s
-1764-Apr-25	00:57:44	40858	2799	-46551	10	H	-n	0.3262	1.0096	26N	31W	71	35	00m57s
-1764-Oct-19	20:49:20	40847	2797	-46545	15	A	nn	-0.0566	0.9548	8S	35E	87	165	05m20s
-1763-Apr-14	14:00:43	40836	2796	-46539	20	T	p-	-0.4452	1.0598	22S	149E	63	219	05m15s
-1763-Oct-08	22:25:40	40825	2794	-46533	25	A	p-	0.6488	0.9183	38N	28E	49	403	09m05s
-1762-Mar-05	23:22:48	40815	2792	-46528	-8	P	-t	1.3776	0.2950	71N	50W	0		
-1762-Apr-04	06:54:45	40814	2792	-46527	30	P	t-	-1.1624	0.7086	72S	19W	0		
-1762-Sep-27	21:45:02	40803	2790	-46521	35	P	t-	1.3186	0.4185	72N	127E	0		
-1761-Feb-23	13:02:54	40793	2789	-46516	2	H	-p	0.6992	1.0028	28N	149E	45	14	00m17s
-1761-Aug-18	14:03:34	40782	2787	-46510	7	T	-p	-0.8245	1.0131	37S	130E	34	79	01m12s
-1760-Feb-12	19:47:44	40771	2785	-46504	12	A	nn	-0.0337	0.9523	21S	58E	88	175	05m54s

-1760-Aug-07	04:52:32	40760	2783	-46498	17	Tm	nn	-0.0832	1.0638	16N	83W	85	210	05m54s
-1759-Jan-31	20:14:57	40749	2781	-46492	22	A	p-	-0.7607	0.9242	70S	64E	40	443	06m25s
-1759-Jul-27	21:34:14	40738	2780	-46486	27	T	p-	0.6351	1.0561	62N	29E	50	240	03m49s
-1759-Dec-22	05:43:46	40729	2778	-46481	-6	P	-t	1.4603	0.1677	64N	69W	0		
-1758-Jan-20	21:05:23	40727	2778	-46480	32	P	t-	-1.4348	0.2180	67S	147W	0		
-1758-Jun-18	00:30:09	40718	2776	-46475	-1	P	-t	-1.2737	0.4940	64S	14E	0		
-1758-Jul-17	11:25:36	40716	2776	-46474	37	P	t-	1.4163	0.2329	66N	3E	0		
-1758-Dec-11	16:24:58	40707	2775	-46469	4	T	-p	0.7107	1.0187	22N	115E	45	90	01m47s
-1757-Jun-07	04:30:33	40696	2773	-46463	9	A	-p	-0.5401	0.9515	11S	71W	57	208	06m08s
-1757-Dec-01	07:33:49	40685	2771	-46457	14	T	nn	0.0290	1.0468	18S	125W	88	156	04m05s
-1756-May-26	05:06:12	40673	2769	-46451	19	A	nn	0.2266	0.9560	30N	95W	77	164	04m46s
-1756-Nov-19	22:35:28	40662	2768	-46445	24	T	p-	-0.6518	1.0162	52S	16W	49	73	01m10s
-1755-May-15	09:39:43	40651	2766	-46439	29	A	t-	0.9821	0.9857	65N	105E	10	286	00m51s
-1755-Oct-10	16:36:23	40642	2764	-46434	-4	P	-t	1.5443	0.0351	61N	173W	0		
-1755-Nov-09	08:53:41	40640	2764	-46433	34	P	t-	-1.3943	0.2848	61S	100E	0		
-1754-Apr-05	14:03:40	40631	2762	-46428	1	T	-p	-0.8611	1.0607	49S	180W	30	384	03m59s
-1754-Sep-29	16:51:59	40620	2761	-46422	6	A	-p	0.8952	0.9133	54N	144E	26	724	07m23s
-1753-Mar-26	07:08:50	40609	2759	-46416	11	T	-n	-0.1287	1.0709	11S	111W	83	232	05m43s
-1753-Sep-18	17:05:02	40598	2757	-46410	16	A	nn	0.1864	0.9456	18N	98E	79	204	05m50s
-1752-Mar-14	22:06:43	40587	2755	-46404	21	T	p-	0.6292	1.0224	26N	2E	51	96	01m57s
-1752-Sep-06	23:47:40	40576	2754	-46398	26	A	p-	-0.5341	0.9991	17S	22W	58	4	00m05s
-1751-Feb-02	15:25:32	40567	2752	-46393	-7	P	-t	-1.4495	0.1969	63S	100W	0		
-1751-Mar-04	06:47:03	40565	2752	-46392	31	P	t-	1.4349	0.2132	61N	175W	0		
-1751-Jul-29	04:50:49	40556	2750	-46387	-2	P	-t	1.3748	0.2989	64N	64E	0		
-1751-Aug-27	13:20:13	40554	2750	-46386	36	P	t-	-1.2055	0.6229	62S	91E	0		
-1750-Jan-22	15:03:56	40545	2749	-46381	3	A	-p	-0.7608	0.9243	69S	157E	40	440	06m12s
-1750-Jul-18	21:17:45	40534	2747	-46375	8	T	-p	0.6849	1.0472	66N	45E	46	216	03m07s
-1749-Jan-11	17:16:34	40523	2745	-46369	13	A	nn	-0.0322	0.9631	26S	93E	88	133	04m13s
-1749-Jul-08	09:39:50	40512	2743	-46363	18	H	nn	-0.0610	1.0013	21N	158W	87	4	00m09s
-1748-Jan-01	02:34:11	40501	2741	-46357	23	H	p-	0.6696	1.0117	18N	51W	48	54	01m12s
-1748-Jun-26	14:58:16	40490	2740	-46351	28	A	p-	-0.8533	0.9496	36S	122E	31	356	05m50s
-1748-Nov-21	06:40:08	40480	2738	-46346	-5	P	-t	-1.3661	0.3198	70S	103E	0		
-1748-Dec-20	17:13:37	40479	2738	-46345	33	P	t-	1.3105	0.4240	67N	93E	0		

-1747-May-17	01:21:15	40469	2736	-46340	0	P	-t	1.2217	0.5842	70N	171W	0			
-1747-Nov-10	20:47:00	40458	2735	-46334	5	H	-p	-0.7405	1.0001	59S	14E	42	1	00m00s	
-1746-May-06	07:53:19	40447	2733	-46328	10	H	-p	0.4033	1.0136	34N	139W	66	51	01m16s	
-1746-Oct-31	05:05:36	40436	2731	-46322	15	A	nn	-0.0593	0.9510	13S	91W	87	180	05m50s	
-1745-Apr-25	21:22:14	40425	2729	-46316	20	T	p-	-0.3724	1.0644	14S	34E	68	226	05m50s	
-1745-Oct-20	06:19:58	40414	2728	-46310	25	A	p-	0.6405	0.9160	33N	95W	50	411	09m50s	
-1744-Mar-16	07:07:42	40405	2726	-46305	-8	P	-t	1.4331	0.1889	71N	179E	0			
-1744-Apr-14	14:25:48	40403	2726	-46304	30	P	t-	-1.0965	0.8367	72S	148W	0			
-1744-Oct-08	05:38:51	40392	2724	-46298	35	P	t-	1.3033	0.4443	72N	8W	0			
-1743-Mar-05	20:36:44	40383	2722	-46293	2	H	-p	0.7516	1.0016	35N	29E	41	8	00m09s	
-1743-Aug-28	22:02:53	40372	2721	-46287	7	T	-p	-0.8558	1.0120	42S	3E	31	80	01m02s	
-1742-Feb-23	03:03:26	40361	2719	-46281	12	A	nn	0.0141	0.9531	15S	53W	89	171	05m53s	
-1742-Aug-18	12:56:16	40350	2717	-46275	17	T	-n	-0.1241	1.0615	11N	154E	83	203	05m43s	
-1741-Feb-12	03:29:50	40339	2715	-46269	22	A	p-	-0.7200	0.9282	64S	44W	44	390	06m24s	
-1741-Aug-08	05:25:15	40328	2714	-46263	27	T	p-	0.5877	1.0516	57N	86W	54	212	03m41s	
-1740-Jan-02	13:58:25	40319	2712	-46258	-6	P	-t	1.4658	0.1561	65N	156E	0			
-1740-Feb-01	04:45:09	40317	2712	-46257	32	P	t-	-1.4027	0.2716	68S	85E	0			
-1740-Jun-28	07:22:06	40308	2710	-46252	-1	P	-t	-1.3511	0.3564	65S	101W	0			
-1740-Jul-27	18:49:15	40306	2710	-46251	37	P	t-	1.3655	0.3270	67N	121W	0			
-1740-Dec-22	01:05:15	40297	2709	-46246	4	T	-p	0.7141	1.0228	22N	19W	44	110	02m11s	
-1739-Jun-17	10:53:50	40286	2707	-46240	9	A	-p	-0.6261	0.9480	15S	169W	51	243	06m44s	
-1739-Dec-11	16:24:49	40275	2705	-46234	14	T	nn	0.0314	1.0479	20S	101E	88	159	04m15s	
-1738-Jun-06	11:30:00	40264	2703	-46228	19	A	nn	0.1395	0.9572	28N	170E	82	157	04m50s	
-1738-Dec-01	07:20:22	40253	2702	-46222	24	T	p-	-0.6528	1.0142	56S	148W	49	64	01m01s	
-1737-May-26	16:28:47	40242	2700	-46216	29	A	t-	0.8988	0.9933	68N	33E	26	54	00m26s	
-1737-Oct-22	00:42:01	40233	2698	-46211	-4	P	-t	1.5551	0.0188	61N	56E	0			
-1737-Nov-20	17:19:23	40231	2698	-46210	34	P	t-	-1.3981	0.2786	62S	37W	0			
-1736-Apr-15	21:31:46	40222	2697	-46205	1	T	-t	-0.9286	1.0617	52S	72E	21	538	03m57s	
-1736-Oct-10	00:39:09	40211	2695	-46199	6	A	-p	0.9100	0.9109	52N	23E	24	800	07m50s	
-1735-Apr-05	14:42:49	40200	2693	-46193	11	T	-n	-0.1948	1.0715	10S	134E	79	236	05m46s	
-1735-Sep-29	00:58:48	40189	2691	-46187	16	A	nn	0.2044	0.9454	14N	22W	78	205	05m50s	
-1734-Mar-26	05:30:24	40178	2690	-46181	21	T	p-	0.5687	1.0223	26N	110W	55	91	01m55s	
-1734-Sep-18	07:58:39	40167	2688	-46175	26	A	p-	-0.5108	0.9995	19S	147W	59	2	00m03s	

-1733-Feb-13	22:43:42	40158	2686	-46170	-7	P	-t	-1.4931	0.1225	62S	139E	0		
-1733-Mar-15	13:51:30	40156	2686	-46169	31	P	t-	1.3799	0.3093	61N	69E	0		
-1733-Aug-09	12:47:26	40147	2685	-46164	-2	P	-t	1.4199	0.2129	63N	67W	0		
-1733-Sep-07	21:37:46	40145	2684	-46163	36	P	t-	-1.1754	0.6796	61S	44W	0		
-1732-Feb-02	22:28:22	40136	2683	-46158	3	A	-p	-0.7943	0.9278	68S	54E	37	446	05m46s
-1732-Jul-29	04:58:12	40125	2681	-46152	8	T	-p	0.7410	1.0404	67N	59W	42	202	02m36s
-1731-Jan-22	01:10:21	40114	2679	-46146	13	A	nn	-0.0551	0.9690	26S	26W	87	112	03m25s
-1731-Jul-18	16:48:57	40103	2678	-46140	18	A	nn	0.0037	0.9951	24N	94E	90	17	00m32s
-1730-Jan-11	10:59:33	40092	2676	-46134	23	T	p-	0.6542	1.0173	17N	179E	49	78	01m46s
-1730-Jul-07	21:34:46	40081	2674	-46128	28	A	p-	-0.7793	0.9472	27S	18E	39	310	06m33s
-1730-Dec-02	15:32:56	40072	2673	-46123	-5	P	-t	-1.3669	0.3184	69S	44W	0		
-1729-Jan-01	01:56:15	40070	2672	-46122	33	P	t-	1.3018	0.4403	66N	50W	0		
-1729-May-28	07:49:05	40061	2671	-46117	0	P	-t	1.3024	0.4439	69N	78E	0		
-1729-Jun-26	22:01:31	40059	2670	-46116	38	Pb	t-	-1.5246	0.0648	67S	14E	0		
-1729-Nov-22	05:29:11	40050	2669	-46111	5	A	-p	-0.7405	0.9973	63S	116W	42	14	00m12s
-1728-May-16	14:49:17	40039	2667	-46105	10	T	-p	0.4811	1.0171	43N	114E	61	67	01m30s
-1728-Nov-10	13:23:23	40028	2666	-46099	15	A	nn	-0.0600	0.9478	17S	143E	86	192	06m17s
-1727-May-06	04:42:17	40017	2664	-46093	20	T	n-	-0.2976	1.0681	5S	81W	73	232	06m18s
-1727-Oct-30	14:17:29	40006	2662	-46087	25	A	p-	0.6350	0.9144	29N	142E	50	418	10m32s
-1726-Mar-27	14:45:07	39997	2661	-46082	-8	Pe	-t	1.4941	0.0724	71N	49E	0		
-1726-Apr-25	21:53:43	39995	2660	-46081	30	P	t-	-1.0282	0.9697	71S	85E	0		
-1726-Oct-19	13:39:31	39984	2659	-46075	35	P	t-	1.2925	0.4624	72N	144W	0		
-1725-Mar-17	04:01:22	39975	2657	-46070	2	A	-p	0.8104	0.9997	44N	89W	36	2	00m02s
-1725-Sep-09	06:11:12	39964	2655	-46064	7	T	-p	-0.8804	1.0111	48S	126W	28	81	00m54s
-1724-Mar-05	10:08:40	39953	2654	-46058	12	A	nn	0.0698	0.9538	8S	162W	86	169	05m50s
-1724-Aug-28	21:08:43	39942	2652	-46052	17	T	-n	-0.1576	1.0589	6N	28E	81	196	05m28s
-1723-Feb-22	10:32:49	39931	2650	-46046	22	A	p-	-0.6693	0.9324	56S	152W	48	340	06m23s
-1723-Aug-18	13:24:52	39921	2648	-46040	27	T	p-	0.5481	1.0467	51N	155E	57	186	03m30s
-1722-Jan-12	22:05:58	39911	2647	-46035	-6	P	-t	1.4776	0.1333	66N	22E	0		
-1722-Feb-11	12:15:25	39910	2647	-46034	32	P	t-	-1.3621	0.3405	69S	41W	0		
-1722-Jul-09	14:18:27	39900	2645	-46029	-1	P	-t	-1.4237	0.2288	66S	144E	0		
-1722-Aug-08	02:20:11	39899	2645	-46028	37	P	t-	1.3211	0.4082	68N	113E	0		
-1721-Jan-02	09:40:25	39890	2643	-46023	4	T	-p	0.7222	1.0271	22N	152W	44	133	02m37s

-1721-Jun-28	17:21:12	39879	2642	-46017	9	A	-p	-0.7081	0.9440	21S	92E	45	291	07m15s
-1721-Dec-23	01:12:55	39868	2640	-46011	14	T	nn	0.0362	1.0494	21S	31W	88	164	04m27s
-1720-Jun-16	17:55:50	39857	2638	-46005	19	A	nn	0.0534	0.9579	25N	74E	87	153	04m58s
-1720-Dec-11	16:04:06	39846	2636	-45999	24	H3	p-	-0.6535	1.0129	60S	83E	49	58	00m55s
-1719-Jun-05	23:19:47	39835	2635	-45993	29	A	t-	0.8159	0.9985	68N	51W	35	9	00m06s
-1719-Nov-01	08:51:24	39826	2633	-45988	-4	Pe	-t	1.5621	0.0086	61N	77W	0		
-1719-Dec-01	01:43:36	39824	2633	-45987	34	P	t-	-1.4017	0.2730	63S	174W	0		
-1718-Apr-27	04:57:06	39815	2631	-45982	1	T-	-t	-0.9986	1.0266	61S	14W	0		
-1718-May-26	11:57:04	39813	2631	-45981	39	Pb	t-	1.5159	0.0316	62N	37E	0		
-1718-Oct-21	08:32:48	39804	2630	-45976	6	A	-p	0.9192	0.9091	50N	100W	23	860	08m18s
-1717-Apr-16	22:12:49	39793	2628	-45970	11	T	-n	-0.2640	1.0714	9S	21E	75	240	05m49s
-1717-Oct-10	08:59:38	39782	2626	-45964	16	A	nn	0.2173	0.9456	10N	144W	77	205	05m51s
-1716-Apr-05	12:47:43	39771	2624	-45958	21	T	p-	0.5037	1.0218	26N	139E	60	85	01m52s
-1716-Sep-28	16:17:23	39760	2623	-45952	26	H	p-	-0.4930	1.0002	22S	86E	60	1	00m01s
-1715-Feb-24	05:51:00	39751	2621	-45947	-7	Pe	-t	-1.5446	0.0344	62S	22E	0		
-1715-Mar-25	20:46:10	39749	2621	-45946	31	P	t-	1.3174	0.4183	61N	46W	0		
-1715-Aug-19	20:52:41	39740	2620	-45941	-2	P	-t	1.4583	0.1405	62N	161E	0		
-1715-Sep-18	06:04:03	39738	2619	-45940	36	P	t-	-1.1523	0.7231	61S	179E	0		
-1714-Feb-13	05:43:21	39729	2618	-45935	3	A	-p	-0.8359	0.9311	66S	47W	33	467	05m21s
-1714-Aug-09	12:46:10	39718	2616	-45929	8	T	-p	0.7901	1.0335	67N	167W	38	184	02m07s
-1713-Feb-02	08:56:15	39707	2614	-45923	13	A	nn	-0.0856	0.9750	26S	142W	85	90	02m39s
-1713-Jul-30	00:04:59	39696	2613	-45917	18	A	nn	0.0619	0.9888	26N	15W	86	40	01m11s
-1712-Jan-22	19:17:30	39686	2611	-45911	23	T	p-	0.6320	1.0233	16N	51E	51	102	02m19s
-1712-Jul-18	04:16:45	39675	2609	-45905	28	A	p-	-0.7100	0.9441	21S	87W	45	291	07m11s
-1712-Dec-13	00:22:50	39666	2608	-45900	-5	P	-t	-1.3702	0.3122	68S	170E	0		
-1711-Jan-11	10:31:57	39664	2607	-45899	33	P	t-	1.2876	0.4672	65N	169E	0		
-1711-Jun-07	14:19:29	39655	2606	-45894	0	P	-t	1.3814	0.3058	68N	33W	0		
-1711-Jul-07	04:34:48	39653	2606	-45893	38	P	t-	-1.4483	0.1958	66S	97W	0		
-1711-Dec-02	14:08:50	39644	2604	-45888	5	A	-p	-0.7420	0.9951	67S	116E	42	26	00m21s
-1710-May-27	21:47:31	39633	2602	-45882	10	T	-p	0.5580	1.0196	51N	6E	56	81	01m36s
-1710-Nov-21	21:41:45	39622	2601	-45876	15	A	nn	-0.0598	0.9454	20S	17E	86	202	06m38s
-1709-May-17	12:01:26	39611	2599	-45870	20	T	n-	-0.2215	1.0711	2N	165E	77	237	06m38s
-1709-Nov-10	22:18:35	39600	2597	-45864	25	A	p-	0.6325	0.9133	25N	18E	51	423	11m10s

-1708-May-06	05:17:41	39589	2595	-45858	30	T	t-	-0.9565	1.0657	58S	67W	16	750	04m22s
-1708-Oct-29	21:46:29	39578	2594	-45852	35	P	t-	1.2865	0.4726	71N	79E	0		
-1707-Mar-27	11:15:43	39569	2592	-45847	2	A	-t	0.8766	0.9970	54N	151E	28	22	00m14s
-1707-Sep-19	14:29:40	39559	2591	-45841	7	T	-p	-0.8973	1.0105	53S	101E	26	82	00m48s
-1706-Mar-16	17:04:26	39548	2589	-45835	12	A	nn	0.1323	0.9544	0S	90E	82	168	05m44s
-1706-Sep-09	05:29:04	39537	2587	-45829	17	T	-n	-0.1845	1.0563	1N	100W	79	189	05m11s
-1705-Mar-05	17:28:51	39526	2585	-45823	22	A	p-	-0.6127	0.9367	48S	101E	52	297	06m22s
-1705-Aug-29	21:31:34	39515	2584	-45817	27	T	p-	0.5151	1.0416	45N	32E	59	162	03m16s
-1704-Jan-24	06:08:05	39506	2582	-45812	-6	P	-t	1.4944	0.1010	67N	111W	0		
-1704-Feb-22	19:39:06	39504	2582	-45811	32	P	t-	-1.3152	0.4213	70S	166W	0		
-1704-Jul-19	21:18:43	39495	2580	-45806	-1	P	-t	-1.4917	0.1107	67S	26E	0		
-1704-Aug-18	09:57:14	39493	2580	-45805	37	P	t-	1.2824	0.4780	69N	14W	0		
-1703-Jan-12	18:09:51	39484	2579	-45800	4	T	-p	0.7356	1.0318	24N	76E	42	158	03m01s
-1703-Jul-08	23:54:00	39473	2577	-45794	9	A	-p	-0.7848	0.9397	28S	10W	38	361	07m38s
-1702-Jan-02	09:54:01	39462	2575	-45788	14	T	nn	0.0466	1.0512	21S	162W	87	170	04m40s
-1702-Jun-28	00:29:31	39451	2574	-45782	19	A	nn	-0.0267	0.9582	22N	25W	89	152	05m09s
-1702-Dec-23	00:41:59	39441	2572	-45776	24	H	p-	-0.6504	1.0120	63S	42W	49	54	00m51s
-1701-Jun-17	06:16:09	39430	2570	-45770	29	H	p-	0.7363	1.0025	66N	140W	42	13	00m11s
-1701-Nov-12	17:01:29	39421	2569	-45765	-4	P	-t	1.5677	0.0004	61N	150E	0		
-1701-Dec-12	10:03:30	39419	2568	-45764	34	P	t-	-1.4027	0.2716	63S	50E	0		
-1700-May-07	12:20:06	39410	2567	-45759	1	P	-t	-1.0706	0.8878	61S	135W	0		
-1700-Jun-05	19:14:21	39408	2567	-45758	39	P	t-	1.4396	0.1766	63N	83W	0		
-1700-Oct-31	16:30:53	39399	2565	-45753	6	A	-p	0.9250	0.9081	48N	135E	22	902	08m45s

17TH CENTURY BCE

In the 17th century BCE the total number of solar eclipses was 230 solar eclipses:
75 partial solar eclipses, 71 annular solar eclipses (69 central annular solar eclipses

with two limits, 1 central annular solar eclipses with one limit, 1 non-central annular solar eclipses with one limit), 60 total solar eclipses (60 central total solar eclipses with two limits, 0 central total solar eclipses with one limit, 0 non-central total solar eclipses with one limit), 24 hybrid solar eclipses.

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°	°	ALT	WIDTH	DUR.
			GREATEST	S								°	km	
														ECLIPSE
-1699-Apr-27	05:36:13	39388	2563	-45747	11	T	-n	-0.3384	1.0703	9S	91W	70	242	05m50s
-1699-Oct-20	17:08:49	39377	2562	-45741	16	Am	nn	0.2241	0.9464	6N	91E	77	202	05m50s
-1698-Apr-16	19:56:55	39366	2560	-45735	21	T	p-	0.4328	1.0206	27N	32E	64	77	01m47s
-1698-Oct-10	00:44:17	39355	2558	-45729	26	H	p-	-0.4812	1.0011	26S	43W	61	4	00m06s
-1697-Apr-06	03:32:18	39344	2557	-45723	31	P	t-	1.2485	0.5384	61N	157W	0		
-1697-Aug-31	05:06:04	39335	2555	-45718	-2	P	-t	1.4903	0.0807	62N	27E	0		
-1697-Sep-29	14:38:21	39334	2555	-45717	36	P	t-	-1.1355	0.7543	61S	40E	0		
-1696-Feb-24	12:49:34	39325	2553	-45712	3	A	-p	-0.8848	0.9344	64S	147W	27	522	04m57s
-1696-Aug-19	20:40:27	39314	2552	-45706	8	T	-p	0.8333	1.0263	65N	82E	33	161	01m39s
-1695-Feb-12	16:35:13	39303	2550	-45700	13	A	nn	-0.1227	0.9814	25S	103E	83	67	01m54s
-1695-Aug-09	07:27:01	39292	2548	-45694	18	A	nn	0.1141	0.9822	27N	125W	83	63	01m50s
-1694-Feb-02	03:28:37	39281	2547	-45688	23	T	p-	0.6033	1.0296	15N	75W	53	125	02m51s
-1694-Jul-29	11:06:04	39270	2545	-45682	28	A	p-	-0.6468	0.9407	17S	168E	50	285	07m41s
-1694-Dec-24	09:09:16	39261	2543	-45677	-5	P	-t	-1.3767	0.3000	67S	25E	0		
-1693-Jan-22	19:01:57	39260	2543	-45676	33	P	t-	1.2686	0.5033	64N	30E	0		
-1693-Jun-18	20:54:45	39251	2542	-45671	0	P	-t	1.4568	0.1736	67N	145W	0		
-1693-Jul-18	11:14:56	39249	2541	-45670	38	P	t-	-1.3764	0.3190	65S	152E	0		
-1693-Dec-13	22:45:37	39240	2540	-45665	5	A	-p	-0.7454	0.9933	70S	7W	41	36	00m28s
-1692-Jun-07	04:49:19	39229	2538	-45659	10	T	-p	0.6330	1.0216	60N	100W	50	95	01m38s
-1692-Dec-02	05:57:10	39218	2537	-45653	15	A	nn	-0.0611	0.9435	23S	108W	86	209	06m54s
-1691-May-27	19:21:50	39207	2535	-45647	20	T	n-	-0.1459	1.0731	10N	52E	82	240	06m48s
-1691-Nov-21	06:19:28	39196	2533	-45641	25	A	p-	0.6297	0.9131	22N	106W	51	424	11m40s

-1690-May-17	12:41:23	39185	2531	-45635	30	T	p-	-0.8849	1.0681	46S	168E	27	477	05m07s
-1690-Nov-10	05:55:50	39175	2530	-45629	35	P	t-	1.2815	0.4809	71N	59W	0		
-1689-Apr-07	18:22:51	39166	2528	-45624	2	A	-t	0.9476	0.9929	65N	24E	18	80	00m30s
-1689-Sep-30	22:56:18	39155	2527	-45618	7	T	-p	-0.9083	1.0102	58S	33W	24	84	00m44s
-1688-Mar-26	23:49:19	39144	2525	-45612	12	A	nn	0.2032	0.9547	8N	15W	78	169	05m37s
-1688-Sep-19	13:58:02	39133	2523	-45606	17	T	-n	-0.2044	1.0537	4S	130E	78	181	04m53s
-1687-Mar-16	00:14:28	39122	2521	-45600	22	A	p-	-0.5470	0.9410	39S	5W	57	260	06m20s
-1687-Sep-09	05:46:52	39111	2520	-45594	27	T	p-	0.4897	1.0364	39N	93W	60	140	02m59s
-1686-Feb-03	14:01:09	39102	2518	-45589	-6	Pe	-t	1.5191	0.0540	68N	117E	0		
-1686-Mar-05	02:53:39	39101	2518	-45588	32	P	t-	-1.2597	0.5183	71S	71E	0		
-1686-Jul-31	04:26:02	39091	2517	-45583	-1	Pe	-t	-1.5527	0.0063	68S	93W	0		
-1686-Aug-29	17:42:46	39090	2516	-45582	37	P	t-	1.2513	0.5336	70N	145W	0		
-1685-Jan-24	02:32:47	39081	2515	-45577	4	T	-p	0.7548	1.0365	27N	54W	41	187	03m23s
-1685-Jul-20	06:32:08	39070	2513	-45571	9	A	-p	-0.8566	0.9349	36S	115W	31	472	07m48s
-1684-Jan-13	18:30:08	39059	2511	-45565	14	T	-n	0.0611	1.0533	20S	68E	87	177	04m55s
-1684-Jul-08	07:08:44	39048	2510	-45559	19	Am	nn	-0.1027	0.9581	18N	125W	84	153	05m22s
-1683-Jan-02	09:14:05	39037	2508	-45553	24	H	p-	-0.6431	1.0116	64S	163W	50	52	00m50s
-1683-Jun-27	13:17:54	39027	2506	-45547	29	H	p-	0.6598	1.0056	64N	126E	48	26	00m25s
-1683-Dec-22	18:18:42	39016	2505	-45541	34	P	t-	-1.4007	0.2751	64S	86W	0		
-1682-May-18	19:43:13	39007	2503	-45536	1	P	-t	-1.1430	0.7476	62S	103E	0		
-1682-Jun-17	02:35:51	39005	2503	-45535	39	P	t-	1.3657	0.3174	64N	155E	0		
-1682-Nov-12	00:31:12	38996	2501	-45530	6	A	-p	0.9292	0.9078	47N	8E	21	934	09m08s
-1681-May-08	12:58:08	38985	2500	-45524	11	T	-p	-0.4136	1.0685	10S	157E	66	243	05m49s
-1681-Nov-01	01:22:45	38974	2498	-45518	16	A	nn	0.2278	0.9477	2N	34W	77	197	05m47s
-1680-Apr-27	03:00:11	38963	2496	-45512	21	T	n-	0.3577	1.0188	27N	74W	69	68	01m39s
-1680-Oct-20	09:17:19	38953	2495	-45506	26	H	p-	-0.4738	1.0023	30S	174W	62	9	00m12s
-1679-Apr-16	10:11:09	38942	2493	-45500	31	P	t-	1.1743	0.6676	61N	92E	0		
-1679-Sep-10	13:27:40	38933	2492	-45495	-2	Pe	-t	1.5159	0.0334	61N	109W	0		
-1679-Oct-09	23:18:53	38931	2491	-45494	36	P	t-	-1.1239	0.7759	61S	100W	0		
-1678-Mar-06	19:46:54	38922	2490	-45489	3	A	-t	-0.9413	0.9369	63S	119E	19	694	04m34s
-1678-Aug-31	04:43:14	38911	2488	-45483	8	T	-p	0.8688	1.0193	63N	35W	29	132	01m13s
-1677-Feb-24	00:06:35	38900	2486	-45477	13	A	nn	-0.1673	0.9877	24S	10W	80	44	01m12s
-1677-Aug-20	14:56:01	38890	2485	-45471	18	A	nn	0.1596	0.9757	26N	123E	81	88	02m28s

-1676-Feb-13	11:31:47	38879	2483	-45465	23	T	p-	0.5674	1.0361	14N	162E	55	146	03m21s
-1676-Aug-08	18:03:25	38868	2481	-45459	28	A	p-	-0.5902	0.9371	14S	61E	54	286	08m04s
-1675-Jan-03	17:48:21	38859	2480	-45454	-5	P	-t	-1.3890	0.2768	66S	117W	0		
-1675-Feb-02	03:21:56	38857	2480	-45453	33	P	t-	1.2418	0.5546	63N	106W	0		
-1675-Jun-29	03:36:22	38848	2478	-45448	0	Pe	-t	1.5275	0.0496	66N	102E	0		
-1675-Jul-28	18:05:06	38847	2478	-45447	38	P	t-	-1.3116	0.4298	64S	38E	0		
-1675-Dec-24	07:16:39	38837	2476	-45442	5	A	-p	-0.7530	0.9920	73S	125W	41	43	00m34s
-1674-Jun-18	11:56:01	38827	2475	-45436	10	T	-p	0.7046	1.0227	67N	155E	45	110	01m36s
-1674-Dec-13	14:08:45	38816	2473	-45430	15	A	nn	-0.0649	0.9423	26S	129E	86	214	07m04s
-1673-Jun-08	02:44:10	38805	2471	-45424	20	T	nn	-0.0715	1.0742	17N	62W	86	241	06m49s
-1673-Dec-02	14:20:47	38794	2470	-45418	25	A	p-	0.6274	0.9135	19N	130E	51	423	12m00s
-1672-May-27	20:02:09	38784	2468	-45412	30	T	p-	-0.8112	1.0687	35S	49E	36	382	05m39s
-1672-Nov-20	14:08:50	38773	2466	-45406	35	P	t-	1.2789	0.4853	70N	163E	0		
-1671-Apr-18	01:21:38	38764	2465	-45401	2	P	-t	1.0243	0.9436	72N	143W	0		
-1671-Oct-11	07:30:21	38753	2463	-45395	7	T	-p	-0.9139	1.0104	62S	170W	23	89	00m43s
-1670-Apr-07	06:26:59	38742	2462	-45389	12	A	np	0.2792	0.9546	16N	119W	74	172	05m29s
-1670-Sep-30	22:34:07	38731	2460	-45383	17	T	-n	-0.2185	1.0513	9S	2W	77	174	04m37s
-1669-Mar-27	06:54:35	38721	2458	-45377	22	A	p-	-0.4765	0.9451	31S	110W	61	228	06m14s
-1669-Sep-20	14:07:46	38710	2456	-45371	27	T	n-	0.4698	1.0313	34N	139E	62	119	02m40s
-1668-Mar-15	10:03:08	38699	2455	-45365	32	P	t-	-1.1991	0.6254	71S	52W	0		
-1668-Sep-09	01:34:52	38688	2453	-45359	37	P	t-	1.2266	0.5770	71N	82E	0		
-1667-Feb-03	10:47:25	38679	2452	-45354	4	T	-p	0.7811	1.0412	31N	177E	38	221	03m40s
-1667-Jul-30	13:18:52	38669	2450	-45348	9	A	-t	-0.9206	0.9297	45S	137E	23	682	07m44s
-1666-Jan-24	02:57:36	38658	2448	-45342	14	T	-n	0.0824	1.0554	18S	60W	85	184	05m10s
-1666-Jul-19	13:57:34	38647	2447	-45336	19	A	nn	-0.1713	0.9577	14N	131E	80	156	05m33s
-1665-Jan-13	17:37:37	38636	2445	-45330	24	H	p-	-0.6297	1.0115	63S	78E	51	51	00m51s
-1665-Jul-08	20:27:56	38626	2443	-45324	29	H	p-	0.5895	1.0079	60N	26E	54	34	00m37s
-1664-Jan-03	02:26:01	38615	2441	-45318	34	P	t-	-1.3934	0.2878	65S	141E	0		
-1664-May-29	03:05:27	38606	2440	-45313	1	P	-t	-1.2161	0.6056	62S	18W	0		
-1664-Jun-27	10:01:15	38604	2440	-45312	39	P	t-	1.2946	0.4534	65N	33E	0		
-1664-Nov-22	08:32:58	38595	2438	-45307	6	A	-p	0.9320	0.9083	46N	118W	21	952	09m26s
-1663-May-18	20:16:35	38584	2437	-45301	11	T	-p	-0.4910	1.0656	12S	46E	61	244	05m44s
-1663-Nov-11	09:40:36	38574	2435	-45295	16	A	nn	0.2287	0.9497	2S	161W	77	189	05m40s

-1662-May-08	09:58:34	38563	2433	-45289	21	H3	nn	0.2798	1.0162	27N	179W	74	58	01m28s
-1662-Oct-31	17:56:22	38552	2432	-45283	26	H	p-	-0.4713	1.0040	34S	54E	62	15	00m20s
-1661-Apr-27	16:43:18	38541	2430	-45277	31	P	t-	1.0952	0.8050	61N	16W	0		
-1661-Oct-21	08:05:20	38531	2428	-45271	36	P	t-	-1.1172	0.7883	61S	118E	0		
-1660-Mar-17	02:37:16	38522	2427	-45266	3	A-	-t	-1.0035	0.9578	61S	48E	0		
-1660-Sep-10	12:53:10	38511	2425	-45260	8	T	-t	0.8978	1.0123	60N	157W	26	95	00m47s
-1659-Mar-06	07:30:27	38500	2424	-45254	13	A	nn	-0.2189	0.9941	23S	122W	77	21	00m34s
-1659-Aug-30	22:32:48	38489	2422	-45248	18	A	-n	0.1977	0.9694	25N	8E	78	112	03m06s
-1658-Feb-23	19:28:25	38479	2420	-45242	23	T	p-	0.5252	1.0425	14N	40E	58	165	03m48s
-1658-Aug-20	01:08:37	38468	2418	-45236	28	A	p-	-0.5404	0.9334	13S	48W	57	291	08m21s
-1657-Jan-15	02:21:34	38459	2417	-45231	-5	P	-t	-1.4060	0.2446	65S	103E	0		
-1657-Feb-13	11:35:34	38457	2417	-45230	33	P	t-	1.2098	0.6160	62N	120E	0		
-1657-Aug-09	01:04:29	38446	2415	-45224	38	P	t-	-1.2532	0.5294	63S	78W	0		
-1656-Jan-04	15:41:13	38437	2414	-45219	5	A	-p	-0.7651	0.9909	73S	122E	40	50	00m37s
-1656-Jun-28	19:07:55	38427	2412	-45213	10	T	-p	0.7727	1.0231	74N	56E	39	125	01m31s
-1656-Dec-23	22:14:21	38416	2410	-45207	15	A	nn	-0.0730	0.9417	28S	7E	86	216	07m06s
-1655-Jun-18	10:10:29	38405	2409	-45201	20	T	nn	-0.0001	1.0745	23N	175W	90	242	06m41s
-1655-Dec-12	22:16:58	38395	2407	-45195	25	A	p-	0.6208	0.9147	16N	8E	52	414	12m07s
-1654-Jun-08	03:25:29	38384	2405	-45189	30	T	p-	-0.7399	1.0678	27S	69W	42	329	05m58s
-1654-Dec-01	22:20:53	38373	2404	-45183	35	P	t-	1.2745	0.4928	69N	26E	0		
-1653-Apr-29	08:14:38	38364	2402	-45178	2	P	-t	1.1044	0.7985	71N	98E	0		
-1653-May-28	18:11:54	38362	2402	-45177	40	Pb	t-	-1.5360	0.0072	69S	95E	0		
-1653-Oct-22	16:09:55	38353	2401	-45172	7	T	-p	-0.9157	1.0111	66S	53E	23	96	00m44s
-1652-Apr-17	12:56:41	38343	2399	-45166	12	A	-p	0.3612	0.9542	25N	139E	69	179	05m19s
-1652-Oct-11	07:16:56	38332	2397	-45160	17	T	-n	-0.2267	1.0492	14S	135W	77	167	04m22s
-1651-Apr-06	13:25:58	38321	2396	-45154	22	A	p-	-0.3984	0.9491	22S	147E	66	203	06m05s
-1651-Sep-30	22:36:51	38311	2394	-45148	27	T	n-	0.4575	1.0264	29N	9E	63	100	02m20s
-1650-Mar-26	17:05:49	38300	2392	-45142	32	P	t-	-1.1319	0.7458	72S	173W	0		
-1650-Sep-20	09:34:05	38289	2391	-45136	37	P	t-	1.2086	0.6082	71N	53W	0		
-1649-Feb-14	18:54:51	38280	2389	-45131	4	T	-p	0.8139	1.0456	36N	50E	35	261	03m51s
-1649-Aug-10	20:13:41	38269	2387	-45125	9	As	-t	-0.9775	0.9237	58S	23E	11	-	07m22s
-1648-Feb-04	11:17:22	38259	2386	-45119	14	T	-n	0.1100	1.0577	14S	174E	84	191	05m24s
-1648-Jul-29	20:54:21	38248	2384	-45113	19	A	nn	-0.2341	0.9570	9N	25E	77	161	05m42s

-1647-Jan-24	01:53:20	38237	2382	-45107	24	H	p-	-0.6106	1.0117	60S	41W	52	51	00m53s
-1647-Jul-19	03:45:47	38227	2381	-45101	29	H	p-	0.5245	1.0096	55N	79W	58	39	00m47s
-1646-Jan-13	10:25:03	38216	2379	-45095	34	P	t-	-1.3802	0.3106	66S	9E	0		
-1646-Jun-09	10:30:43	38207	2378	-45090	1	P	-t	-1.2867	0.4682	63S	140W	0		
-1646-Jul-08	17:33:27	38205	2377	-45089	39	P	t-	1.2286	0.5799	66N	92W	0		
-1646-Dec-03	16:34:13	38196	2376	-45084	6	A	-p	0.9351	0.9095	46N	115E	20	969	09m36s
-1645-May-30	03:34:37	38185	2374	-45078	11	T	-p	-0.5680	1.0619	14S	65W	55	244	05m33s
-1645-Nov-22	18:00:09	38175	2373	-45072	16	A	nn	0.2290	0.9523	5S	72E	77	179	05m30s
-1644-May-18	16:53:56	38164	2371	-45066	21	H	nn	0.2004	1.0131	26N	78E	78	46	01m13s
-1644-Nov-11	02:37:33	38153	2369	-45060	26	H	p-	-0.4696	1.0062	39S	78W	62	24	00m30s
-1643-May-07	23:11:07	38143	2368	-45054	31	P	t-	1.0127	0.9478	61N	123W	0		
-1643-Oct-31	16:55:35	38132	2366	-45048	36	P	t-	-1.1137	0.7948	61S	25W	0		
-1642-Mar-28	09:21:09	38123	2365	-45043	3	P	-t	-1.0716	0.8428	61S	64W	0		
-1642-Sep-21	21:09:39	38112	2363	-45037	8	H	-t	0.9209	1.0057	58N	78E	23	50	00m22s
-1641-Mar-17	14:47:57	38102	2361	-45031	13	H	nn	-0.2770	1.0002	21S	129E	74	1	00m01s
-1641-Sep-11	06:17:17	38091	2360	-45025	18	A	-n	0.2287	0.9633	22N	109W	77	136	03m43s
-1640-Mar-06	03:15:54	38080	2358	-45019	23	T	p-	0.4748	1.0488	14N	79W	62	182	04m13s
-1640-Aug-30	08:23:21	38070	2356	-45013	28	A	p-	-0.4985	0.9298	13S	159W	60	299	08m34s
-1639-Jan-25	10:45:27	38061	2355	-45008	-5	P	-t	-1.4304	0.1983	64S	34W	0		
-1639-Feb-23	19:38:50	38059	2355	-45007	33	P	t-	1.1697	0.6934	62N	12W	0		
-1639-Aug-19	08:14:56	38048	2353	-45001	38	P	t-	-1.2029	0.6150	62S	163E	0		
-1638-Jan-14	23:56:35	38039	2352	-44996	5	A	-p	-0.7843	0.9901	73S	12E	38	56	00m40s
-1638-Jul-10	02:27:29	38029	2350	-44990	10	T	-p	0.8354	1.0227	79N	30W	33	142	01m24s
-1637-Jan-04	06:13:45	38018	2348	-44984	15	A	nn	-0.0857	0.9417	29S	113W	85	217	07m01s
-1637-Jun-29	17:39:42	38007	2347	-44978	20	Tm	nn	0.0693	1.0740	28N	72E	86	241	06m27s
-1637-Dec-24	06:10:32	37997	2345	-44972	25	A	p-	0.6119	0.9165	14N	114W	52	401	11m58s
-1636-Jun-18	10:49:05	37986	2343	-44966	30	T	p-	-0.6689	1.0659	20S	175E	48	290	06m06s
-1636-Dec-12	06:31:53	37975	2342	-44960	35	P	t-	1.2687	0.5026	68N	110W	0		
-1635-May-09	15:02:15	37966	2340	-44955	2	P	-t	1.1874	0.6485	71N	19W	0		
-1635-Jun-08	01:13:43	37965	2340	-44954	40	P	t-	-1.4668	0.1371	68S	24W	0		
-1635-Nov-02	00:54:32	37956	2339	-44949	7	T	-p	-0.9139	1.0124	70S	85W	23	106	00m47s
-1634-Apr-28	19:22:23	37945	2337	-44943	12	A	-p	0.4456	0.9533	34N	38E	63	190	05m08s
-1634-Oct-22	16:03:42	37934	2335	-44937	17	T	-n	-0.2316	1.0474	19S	91E	76	162	04m10s

-1633-Apr-17	19:54:57	37924	2334	-44931	22	A	p-	-0.3178	0.9527	13S	45E	71	182	05m53s
-1633-Oct-12	07:10:37	37913	2332	-44925	27	T	n-	0.4496	1.0217	24N	122W	63	83	02m00s
-1632-Apr-06	00:03:50	37902	2330	-44919	32	P	t-	-1.0597	0.8763	72S	67E	0		
-1632-Sep-30	17:39:42	37892	2329	-44913	37	P	t-	1.1965	0.6287	72N	170E	0		
-1631-Feb-25	02:54:09	37883	2327	-44908	4	T	-p	0.8540	1.0495	43N	77W	31	315	03m54s
-1631-Aug-21	03:18:28	37872	2326	-44902	9	P	-t	-1.0260	0.9102	70S	104W	0		
-1630-Feb-14	19:27:38	37862	2324	-44896	14	T	-n	0.1454	1.0597	9S	49E	82	198	05m35s
-1630-Aug-10	04:03:02	37851	2322	-44890	19	A	nn	-0.2876	0.9562	4N	85W	73	166	05m46s
-1629-Feb-04	09:59:18	37840	2321	-44884	24	H	p-	-0.5843	1.0121	56S	160W	54	51	00m57s
-1629-Jul-30	11:12:38	37830	2319	-44878	29	H	p-	0.4662	1.0108	50N	172E	62	42	00m55s
-1628-Jan-24	18:14:26	37819	2317	-44872	34	P	t-	-1.3602	0.3449	67S	121W	0		
-1628-Jun-19	17:58:31	37810	2316	-44867	1	P	-t	-1.3550	0.3355	64S	97E	0		
-1628-Jul-19	01:12:30	37808	2316	-44866	39	P	t-	1.1679	0.6958	67N	141E	0		
-1628-Dec-14	00:32:02	37799	2314	-44861	6	A	-p	0.9411	0.9113	46N	11W	19	1004	09m34s
-1627-Jun-09	10:52:43	37789	2313	-44855	11	T	-p	-0.6443	1.0572	18S	177W	50	244	05m14s
-1627-Dec-03	02:20:09	37778	2311	-44849	16	A	nn	0.2293	0.9557	8S	55W	77	166	05m13s
-1626-May-29	23:47:24	37768	2309	-44843	21	Hm	nn	0.1204	1.0092	25N	25W	83	32	00m54s
-1626-Nov-22	11:20:56	37757	2308	-44837	26	H	p-	-0.4694	1.0089	43S	151E	62	35	00m43s
-1625-May-19	05:35:42	37746	2306	-44831	31	A	t-	0.9281	0.9523	67N	179E	21	470	03m19s
-1625-Nov-12	01:49:15	37736	2305	-44825	36	P	t-	-1.1130	0.7961	61S	169W	0		
-1624-Apr-07	15:58:11	37727	2303	-44820	3	P	-t	-1.1453	0.7168	61S	173W	0		
-1624-Oct-02	05:33:09	37716	2302	-44814	8	A	-t	0.9374	0.9995	56N	51W	20	5	00m02s
-1623-Mar-27	21:59:50	37706	2300	-44808	13	H	-n	-0.3404	1.0061	20S	20E	70	22	00m33s
-1623-Sep-21	14:08:46	37695	2298	-44802	18	A	-n	0.2528	0.9576	19N	132E	75	159	04m20s
-1622-Mar-17	10:57:56	37684	2297	-44796	23	T	p-	0.4193	1.0548	15N	164E	65	197	04m35s
-1622-Sep-10	15:46:40	37674	2295	-44790	28	A	p-	-0.4641	0.9263	14S	88E	62	308	08m44s
-1621-Feb-05	19:02:23	37665	2294	-44785	-5	P	-t	-1.4604	0.1414	63S	169W	0		
-1621-Mar-07	03:35:53	37663	2293	-44784	33	P	t-	1.1245	0.7809	61N	142W	0		
-1621-Aug-30	15:34:32	37652	2292	-44778	38	P	t-	-1.1591	0.6892	61S	43E	0		
-1620-Jan-26	08:03:57	37643	2290	-44773	5	A	-p	-0.8093	0.9893	71S	99W	36	64	00m43s
-1620-Jul-20	09:54:53	37633	2289	-44767	10	T	-p	0.8926	1.0217	80N	102W	26	166	01m16s
-1619-Jan-14	14:02:52	37622	2287	-44761	15	A	nn	-0.1062	0.9420	30S	130E	84	216	06m51s
-1619-Jul-10	01:15:53	37612	2285	-44755	20	T	nn	0.1331	1.0727	32N	42W	82	238	06m08s

-1618-Jan-03	13:56:21	37601	2284	-44749	25	A	p-	0.5962	0.9190	13N	126E	53	382	11m34s
-1618-Jun-29	18:17:12	37590	2282	-44743	30	T	p-	-0.6022	1.0630	13S	59E	53	259	06m01s
-1618-Dec-23	14:38:18	37580	2280	-44737	35	P	t-	1.2582	0.5206	67N	116E	0		
-1617-May-20	21:47:11	37571	2279	-44732	2	P	-t	1.2713	0.4978	70N	135W	0		
-1617-Jun-19	08:17:03	37569	2279	-44731	40	P	t-	-1.3993	0.2630	67S	143W	0		
-1617-Nov-13	09:41:40	37560	2277	-44726	7	T	-p	-0.9107	1.0143	74S	138E	24	120	00m52s
-1616-May-09	01:41:47	37550	2276	-44720	12	A	-p	0.5345	0.9518	44N	61W	57	208	04m57s
-1616-Nov-02	00:55:16	37539	2274	-44714	17	T	-n	-0.2325	1.0461	23S	44W	76	158	04m01s
-1615-Apr-28	02:18:43	37528	2273	-44708	22	A	nn	-0.2322	0.9559	4S	55W	77	165	05m37s
-1615-Oct-22	15:49:40	37518	2271	-44702	27	T	n-	0.4468	1.0176	19N	105E	63	67	01m40s
-1614-Apr-17	06:57:59	37507	2269	-44696	32	A	t-	-0.9828	0.9847	67S	77W	10	317	01m04s
-1614-Oct-12	01:51:52	37497	2268	-44690	37	P	t-	1.1903	0.6388	72N	31E	0		
-1613-Mar-08	10:46:29	37488	2266	-44685	4	T	-p	0.9001	1.0528	51N	156E	25	401	03m49s
-1613-Sep-01	10:31:55	37477	2265	-44679	9	P	-t	-1.0672	0.8398	70S	133E	0		
-1612-Feb-26	03:30:16	37467	2263	-44673	14	T	-n	0.1868	1.0616	4S	74W	79	206	05m44s
-1612-Aug-20	11:21:32	37456	2261	-44667	19	A	-n	-0.3337	0.9554	2S	163E	70	172	05m46s
-1611-Feb-14	17:55:13	37445	2260	-44661	24	H	p-	-0.5507	1.0125	50S	82E	56	52	01m01s
-1611-Aug-09	18:49:28	37435	2258	-44655	29	H	p-	0.4154	1.0115	45N	59E	65	44	01m01s
-1610-Feb-04	01:54:33	37424	2256	-44649	34	P	t-	-1.3338	0.3903	69S	111E	0		
-1610-Jul-01	01:30:50	37415	2255	-44644	1	P	-t	-1.4197	0.2103	65S	28W	0		
-1610-Jul-30	08:58:45	37414	2255	-44643	39	P	t-	1.1129	0.8006	68N	12E	0		
-1610-Dec-25	08:25:52	37405	2253	-44638	6	A	-p	0.9503	0.9135	48N	136W	18	1074	09m18s
-1609-Jun-20	18:12:55	37394	2252	-44632	11	T	-p	-0.7179	1.0518	22S	70E	44	245	04m47s
-1609-Dec-14	10:38:08	37384	2250	-44626	16	A	nn	0.2322	0.9596	9S	179E	77	151	04m50s
-1608-Jun-09	06:39:40	37373	2249	-44620	21	H	nn	0.0403	1.0047	23N	128W	88	16	00m29s
-1608-Dec-02	20:03:24	37362	2247	-44614	26	H	p-	-0.4678	1.0122	46S	21E	62	48	00m58s
-1607-May-29	11:59:29	37352	2245	-44608	31	A	p-	0.8430	0.9525	67N	103E	32	322	03m32s
-1607-Nov-22	10:42:09	37341	2244	-44602	36	P	t-	-1.1119	0.7981	62S	47E	0		
-1606-Apr-18	22:32:09	37333	2242	-44597	3	P	-t	-1.2217	0.5849	61S	78E	0		
-1606-Oct-13	14:02:05	37322	2241	-44591	8	A	-t	0.9487	0.9940	55N	177E	18	66	00m25s
-1605-Apr-08	05:06:50	37311	2239	-44585	13	H	-p	-0.4090	1.0115	20S	88W	66	43	01m03s
-1605-Oct-02	22:06:51	37301	2237	-44579	18	A	-n	0.2708	0.9523	16N	11E	74	180	04m58s
-1604-Mar-27	18:32:48	37290	2236	-44573	23	T	n-	0.3571	1.0603	15N	49E	69	211	04m56s

16TH CENTURY BCE

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°	°	ALT	WIDTH	DUR.
GREATEST			S									°	km	
ECLIPSE														

-1599-Jan-02	22:41:04	37186	2220	-44514	35	P	t-	1.2440	0.5451	66N	17W	0
-1599-May-31	04:30:19	37177	2219	-44509	2	P	-t	1.3553	0.3482	69N	111E	0
-1599-Jun-29	15:22:38	37176	2218	-44508	40	P	t-	-1.3343	0.3831	66S	98E	0

-1599-Nov-23	18:29:40	37167	2217	-44503	7	T	-p	-0.9074	1.0167	78S	1E	24	138	00m59s
-1598-May-20	08:01:09	37156	2215	-44497	12	A	-p	0.6227	0.9498	54N	160W	51	235	04m46s
-1598-Nov-13	09:48:46	37146	2214	-44491	17	T	-n	-0.2321	1.0452	28S	178W	76	155	03m55s
-1597-May-09	08:41:54	37135	2212	-44485	22	A	nn	-0.1455	0.9587	5N	155W	82	152	05m18s
-1597-Nov-03	00:31:15	37125	2210	-44479	27	H	n-	0.4467	1.0138	15N	28W	63	53	01m22s
-1596-Apr-27	13:50:45	37114	2209	-44473	32	A	t-	-0.9035	0.9937	53S	151E	25	51	00m31s
-1596-Oct-22	10:08:02	37104	2207	-44467	37	P	t-	1.1882	0.6418	71N	109W	0		
-1595-Mar-18	18:31:11	37095	2206	-44462	4	T	-t	0.9529	1.0548	61N	24E	17	606	03m33s
-1595-Sep-11	17:56:09	37084	2204	-44456	9	P	-t	-1.0993	0.7852	71S	7E	0		
-1594-Mar-08	11:24:05	37074	2203	-44450	14	T	-n	0.2354	1.0630	3N	164E	76	212	05m48s
-1594-Aug-31	18:50:59	37063	2201	-44444	19	A	-n	-0.3712	0.9546	7S	47E	68	178	05m41s
-1593-Feb-26	01:41:10	37053	2199	-44438	24	H	p-	-0.5097	1.0128	44S	36W	59	51	01m06s
-1593-Aug-21	02:36:37	37042	2198	-44432	29	H	p-	0.3725	1.0120	39N	59W	68	44	01m05s
-1592-Feb-15	09:22:03	37031	2196	-44426	34	P	t-	-1.2978	0.4523	69S	14W	0		
-1592-Jul-11	09:07:43	37023	2195	-44421	1	Pe	-t	-1.4806	0.0929	66S	154W	0		
-1592-Aug-09	16:53:30	37021	2195	-44420	39	P	t-	1.0645	0.8923	69N	120W	0		
-1591-Jan-04	16:13:21	37012	2193	-44415	6	A	-p	0.9650	0.9160	51N	101E	15	1254	08m45s
-1591-Jul-01	01:36:05	37002	2192	-44409	11	T	-p	-0.7884	1.0455	28S	44W	38	246	04m10s
-1591-Dec-24	18:52:26	36991	2190	-44403	16	A	nn	0.2389	0.9642	10S	54E	76	133	04m20s
-1590-Jun-20	13:33:29	36981	2188	-44397	21	A	nn	-0.0374	0.9997	21N	129E	88	1	00m02s
-1590-Dec-14	04:45:16	36970	2187	-44391	26	T	p-	-0.4652	1.0161	49S	108W	62	62	01m16s
-1589-Jun-09	18:21:58	36960	2185	-44385	31	A	p-	0.7571	0.9516	66N	23E	40	271	03m51s
-1589-Dec-03	19:36:01	36949	2184	-44379	36	P	t-	-1.1116	0.7989	63S	97W	0		
-1588-Apr-29	05:02:49	36940	2182	-44374	3	P	-t	-1.3009	0.4471	61S	30W	0		
-1588-May-28	18:59:44	36939	2182	-44373	41	Pb	t-	1.5125	0.0841	62N	83W	0		
-1588-Oct-23	22:35:51	36930	2181	-44368	8	A	-t	0.9558	0.9892	53N	43E	17	129	00m47s
-1587-Apr-18	12:10:34	36919	2179	-44362	13	T	-p	-0.4813	1.0163	20S	166E	61	63	01m29s
-1587-Oct-13	06:11:01	36909	2177	-44356	18	A	-n	0.2830	0.9476	12N	112W	73	200	05m35s
-1586-Apr-08	02:04:21	36898	2176	-44350	23	T	n-	0.2913	1.0653	16N	65W	73	222	05m16s
-1586-Oct-02	06:59:02	36888	2174	-44344	28	A	p-	-0.4158	0.9204	19S	144W	65	327	08m59s
-1585-Mar-28	19:05:09	36877	2173	-44338	33	P	t-	1.0139	0.9956	61N	35W	0		
-1585-Sep-21	06:47:04	36867	2171	-44332	38	P	t-	-1.0956	0.7965	61S	154E	0		
-1584-Feb-16	23:47:36	36858	2170	-44327	5	A	-t	-0.8830	0.9871	67S	41E	28	97	00m51s

-1584-Aug-11	01:15:53	36847	2168	-44321	10	T	-t	0.9877	1.0165	68N	75E	8	410	00m51s
-1583-Feb-05	05:13:21	36837	2166	-44315	15	A	nn	-0.1685	0.9436	29S	96W	80	211	06m20s
-1583-Jul-31	16:47:44	36826	2165	-44309	20	T	-n	0.2450	1.0683	36N	86E	76	230	05m26s
-1582-Jan-25	05:05:37	36816	2163	-44303	25	A	p-	0.5460	0.9257	10N	107W	57	331	10m07s
-1582-Jul-21	09:25:51	36805	2162	-44297	30	T	p-	-0.4806	1.0550	5S	174W	61	206	05m19s
-1581-Jan-14	06:37:23	36795	2160	-44291	35	P	t-	1.2235	0.5808	64N	148W	0		
-1581-Jun-11	11:12:31	36786	2159	-44286	2	P	-t	1.4386	0.2010	68N	3W	0		
-1581-Jul-10	22:31:18	36784	2158	-44285	40	P	t-	-1.2723	0.4964	65S	21W	0		
-1581-Dec-05	03:17:33	36776	2157	-44280	7	T	-p	-0.9050	1.0196	82S	133W	25	160	01m08s
-1580-May-30	14:18:28	36765	2156	-44274	12	A	-p	0.7123	0.9472	64N	101E	44	278	04m35s
-1580-Nov-23	18:42:55	36755	2154	-44268	17	T	-n	-0.2310	1.0450	31S	48E	76	154	03m52s
-1579-May-19	15:04:06	36744	2152	-44262	22	A	nn	-0.0571	0.9609	13N	106E	87	142	04m58s
-1579-Nov-13	09:15:44	36734	2151	-44256	27	H	n-	0.4493	1.0107	12N	162W	63	41	01m05s
-1578-May-08	20:42:32	36723	2149	-44250	32	H	t-	-0.8220	1.0005	41S	37E	34	3	00m03s
-1578-Nov-02	18:27:26	36713	2148	-44244	37	P	t-	1.1894	0.6393	71N	111E	0		
-1577-Mar-30	02:10:22	36704	2146	-44239	4	T+	-t	1.0107	1.0001	72N	140W	0		
-1577-Apr-28	09:27:58	36702	2146	-44238	42	Pb	t-	-1.5198	0.0232	71S	107W	0		
-1577-Sep-23	01:29:10	36693	2145	-44233	9	P	-t	-1.1242	0.7429	72S	122W	0		
-1576-Mar-18	19:09:21	36683	2143	-44227	14	T	-n	0.2907	1.0640	10N	44E	73	218	05m47s
-1576-Sep-11	02:31:00	36672	2141	-44221	19	A	-n	-0.4009	0.9540	13S	71W	66	182	05m34s
-1575-Mar-08	09:17:27	36662	2140	-44215	24	H	p-	-0.4615	1.0130	37S	153W	62	50	01m10s
-1575-Aug-31	10:33:19	36651	2138	-44209	29	H	n-	0.3366	1.0123	33N	179W	70	45	01m08s
-1574-Feb-25	16:40:17	36641	2137	-44203	34	P	t-	-1.2551	0.5261	70S	138W	0		
-1574-Aug-21	00:56:48	36630	2135	-44197	39	P	t-	1.0230	0.9707	70N	106E	0		
-1573-Jan-15	23:55:10	36622	2134	-44192	6	An	-t	0.9845	0.9183	58N	23W	9	-	07m57s
-1573-Jul-12	09:02:37	36611	2132	-44186	11	T	-t	-0.8552	1.0384	35S	160W	31	250	03m26s
-1572-Jan-05	03:02:29	36601	2131	-44180	16	A	-n	0.2500	0.9693	10S	70W	76	114	03m45s
-1572-Jun-30	20:29:46	36590	2129	-44174	21	A	nn	-0.1118	0.9941	17N	24E	84	21	00m40s
-1572-Dec-24	13:22:00	36580	2127	-44168	26	T	p-	-0.4580	1.0206	50S	125E	63	79	01m37s
-1571-Jun-20	00:48:04	36569	2126	-44162	31	A	p-	0.6746	0.9499	63N	62W	47	249	04m15s
-1571-Dec-14	04:26:15	36559	2124	-44156	36	P	t-	-1.1090	0.8042	64S	119E	0		
-1570-May-10	11:33:38	36550	2123	-44151	3	P	-t	-1.3803	0.3078	61S	138W	0		
-1570-Jun-09	01:20:58	36548	2123	-44150	41	P	t-	1.4261	0.2323	63N	170E	0		

-1570-Nov-04	07:11:27	36540	2121	-44145	8	A	-t	0.9605	0.9850	52N	93W	16	190	01m08s
-1569-Apr-29	19:12:32	36529	2120	-44139	13	T	-p	-0.5559	1.0205	21S	59E	56	83	01m53s
-1569-Oct-24	14:19:52	36519	2118	-44133	18	A	-n	0.2907	0.9435	8N	123E	73	217	06m13s
-1568-Apr-18	09:29:35	36508	2117	-44127	23	T	n-	0.2197	1.0696	17N	176W	77	232	05m35s
-1568-Oct-12	14:47:13	36498	2115	-44121	28	A	p-	-0.4016	0.9181	23S	96E	66	335	09m05s
-1567-Apr-08	02:39:27	36487	2113	-44115	33	T	t-	0.9505	1.0617	57N	125W	18	650	03m39s
-1567-Oct-01	14:37:57	36477	2112	-44109	38	P	t-	-1.0747	0.8319	60S	26E	0		
-1566-Feb-27	07:23:43	36468	2110	-44104	5	A	-t	-0.9315	0.9851	65S	65W	21	145	00m57s
-1566-Aug-22	09:11:12	36458	2109	-44098	10	P	-t	1.0242	0.9570	62N	40W	0		
-1565-Feb-16	12:33:43	36447	2107	-44092	15	A	nn	-0.2110	0.9446	28S	154E	78	209	06m04s
-1565-Aug-12	00:44:22	36437	2106	-44086	20	T	-n	0.2922	1.0653	36N	32W	73	223	05m05s
-1564-Feb-05	12:28:17	36426	2104	-44080	25	A	p-	0.5106	0.9297	9N	140E	59	303	09m13s
-1564-Jul-31	17:09:03	36416	2103	-44074	30	T	n-	-0.4279	1.0500	3S	68E	65	183	04m48s
-1563-Jan-24	14:27:02	36405	2101	-44068	35	P	t-	1.1966	0.6280	64N	84E	0		
-1563-Jun-21	17:56:46	36397	2100	-44063	2	Pe	-t	1.5189	0.0605	67N	117W	0		
-1563-Jul-21	05:45:24	36395	2099	-44062	40	P	t-	-1.2153	0.5994	64S	142W	0		
-1563-Dec-15	12:03:23	36386	2098	-44057	7	T	-p	-0.9051	1.0228	87S	104E	25	186	01m18s
-1562-Jun-10	20:38:11	36376	2096	-44051	12	A	-p	0.7992	0.9440	74N	4E	37	347	04m26s
-1562-Dec-05	03:35:33	36365	2095	-44045	17	T	-n	-0.2313	1.0450	34S	86W	76	154	03m50s
-1561-May-30	21:29:02	36355	2093	-44039	22	A	nn	0.0298	0.9628	21N	6E	88	135	04m37s
-1561-Nov-24	17:59:13	36344	2092	-44033	27	H	n-	0.4520	1.0080	9N	64E	63	31	00m51s
-1560-May-19	03:34:37	36334	2090	-44027	32	H	p-	-0.7396	1.0062	31S	74W	42	32	00m37s
-1560-Nov-13	02:47:51	36324	2089	-44021	37	P	t-	1.1921	0.6341	70N	29W	0		
-1559-Apr-09	09:44:01	36315	2087	-44016	4	P	-t	1.0734	0.8804	72N	91E	0		
-1559-May-08	16:46:02	36313	2087	-44015	42	P	t-	-1.4451	0.1648	71S	129E	0		
-1559-Oct-03	09:10:27	36305	2086	-44010	9	P	-t	-1.1424	0.7122	72S	107E	0		
-1558-Mar-30	02:47:25	36294	2084	-44004	14	T	-n	0.3518	1.0642	18N	75W	69	224	05m39s
-1558-Sep-22	10:21:39	36284	2083	-43998	19	A	-n	-0.4226	0.9538	18S	168E	65	185	05m23s
-1557-Mar-19	16:43:36	36273	2081	-43992	24	H	n-	-0.4057	1.0128	29S	92E	66	48	01m13s
-1557-Sep-11	18:40:09	36263	2079	-43986	29	H	n-	0.3085	1.0124	28N	57E	72	45	01m10s
-1556-Mar-07	23:46:41	36252	2078	-43980	34	P	t-	-1.2032	0.6156	71S	100E	0		
-1556-Aug-31	09:09:31	36242	2076	-43974	39	Tn	t-	0.9893	1.0404	75N	51W	7	-	02m04s
-1555-Jan-26	07:27:31	36233	2075	-43969	6	A+	-t	1.0118	0.9353	68N	148W	0		

-1555-Jul-22	16:35:07	36223	2073	-43963	11	T	-t	-0.9160	1.0306	44S	81E	23	260	02m35s
-1554-Jan-15	11:07:05	36212	2072	-43957	16	A	-n	0.2660	0.9749	8S	167E	75	93	03m03s
-1554-Jul-12	03:29:14	36202	2070	-43951	21	A	nn	-0.1824	0.9882	13N	82W	80	42	01m24s
-1553-Jan-04	21:55:32	36192	2069	-43945	26	T	p-	-0.4476	1.0254	51S	0E	63	97	02m01s
-1553-Jul-01	07:16:30	36181	2067	-43939	31	A	p-	0.5943	0.9476	60N	150W	53	240	04m44s
-1553-Dec-25	13:13:34	36171	2065	-43933	36	P	t-	-1.1039	0.8144	65S	24W	0		
-1552-May-20	18:03:36	36162	2064	-43928	3	P	-t	-1.4609	0.1658	62S	114E	0		
-1552-Jun-19	07:44:50	36160	2064	-43927	41	P	t-	1.3406	0.3793	64N	63E	0		
-1552-Nov-14	15:49:28	36152	2063	-43922	8	A	-t	0.9629	0.9815	51N	131E	15	244	01m27s
-1551-May-10	02:14:30	36141	2061	-43916	13	T	-p	-0.6315	1.0240	22S	48W	51	103	02m12s
-1551-Nov-03	22:31:00	36131	2059	-43910	18	A	-n	0.2958	0.9401	4N	2W	73	231	06m50s
-1550-Apr-29	16:54:17	36120	2058	-43904	23	T	n-	0.1470	1.0731	17N	72E	81	240	05m54s
-1550-Oct-23	22:40:17	36110	2056	-43898	28	A	p-	-0.3915	0.9165	27S	24W	67	342	09m09s
-1549-Apr-19	10:09:39	36100	2055	-43892	33	T	p-	0.8836	1.0653	55N	130E	28	450	04m00s
-1549-Oct-12	22:36:34	36089	2053	-43886	38	P	t-	-1.0590	0.8584	60S	104W	0		
-1548-Mar-09	14:50:01	36080	2052	-43881	5	A	-t	-0.9871	0.9813	63S	157W	8	456	01m08s
-1548-Sep-01	17:16:26	36070	2050	-43875	10	P	-t	1.0537	0.9022	61N	172W	0		
-1547-Feb-26	19:41:49	36060	2049	-43869	15	A	-n	-0.2633	0.9456	27S	47E	75	207	05m49s
-1547-Aug-22	08:50:57	36049	2047	-43863	20	T	-n	0.3314	1.0622	35N	153W	70	216	04m46s
-1546-Feb-15	19:41:08	36039	2046	-43857	25	A	p-	0.4663	0.9340	9N	29E	62	275	08m17s
-1546-Aug-12	00:59:30	36028	2044	-43851	30	T	n-	-0.3816	1.0447	2S	51W	68	160	04m13s
-1545-Feb-04	22:09:03	36018	2043	-43845	35	P	t-	1.1622	0.6888	63N	43W	0		
-1545-Aug-01	13:05:05	36008	2041	-43839	40	P	t-	-1.1632	0.6923	63S	97E	0		
-1545-Dec-26	20:44:55	35999	2040	-43834	7	T	-p	-0.9093	1.0265	88S	93E	24	220	01m28s
-1544-Jun-21	02:59:17	35989	2038	-43828	12	A	-t	0.8845	0.9399	85N	89W	27	485	04m19s
-1544-Dec-15	12:25:44	35978	2037	-43822	17	T	-n	-0.2337	1.0457	36S	142E	76	157	03m52s
-1543-Jun-10	03:56:53	35968	2035	-43816	22	Am	nn	0.1151	0.9641	28N	93W	83	131	04m16s
-1543-Dec-05	02:41:03	35957	2033	-43810	27	H	n-	0.4538	1.0060	6N	69W	63	23	00m39s
-1542-May-30	10:29:32	35947	2032	-43804	32	H	p-	-0.6580	1.0110	22S	176E	49	50	01m09s
-1542-Nov-24	11:09:06	35937	2030	-43798	37	P	t-	1.1961	0.6271	69N	168W	0		
-1541-Apr-20	17:13:10	35928	2029	-43793	4	P	-t	1.1402	0.7520	71N	37W	0		
-1541-May-20	00:02:56	35926	2029	-43792	42	P	t-	-1.3685	0.3110	70S	5E	0		
-1541-Oct-14	16:59:42	35918	2027	-43787	9	P	-t	-1.1542	0.6922	72S	26W	0		

-1540-Apr-09	10:18:59	35907	2026	-43781	14	T	-p	0.4182	1.0638	26N	168E	65	229	05m25s
-1540-Oct-02	18:21:37	35897	2024	-43775	19	A	-n	-0.4374	0.9538	23S	45E	64	186	05m10s
-1539-Mar-30	00:01:24	35887	2023	-43769	24	H	n-	-0.3439	1.0122	21S	22W	70	45	01m13s
-1539-Sep-22	02:56:24	35876	2021	-43763	29	H	n-	0.2874	1.0127	22N	69W	73	45	01m13s
-1538-Mar-19	06:45:13	35866	2020	-43757	34	P	t-	-1.1457	0.7151	71S	19W	0		
-1538-Sep-11	17:29:26	35856	2018	-43751	39	T	t-	0.9614	1.0409	73N	137E	15	516	02m18s
-1537-Feb-06	14:53:17	35847	2017	-43746	6	P	-t	1.0447	0.8817	69N	87E	0		
-1537-Aug-03	00:13:22	35836	2015	-43740	11	T	-t	-0.9712	1.0216	55S	42W	13	321	01m40s
-1536-Jan-26	19:04:06	35826	2014	-43734	16	A	-n	0.2894	0.9809	5S	46E	73	71	02m18s
-1536-Jul-22	10:34:12	35816	2012	-43728	21	A	-n	-0.2475	0.9820	9N	170E	76	66	02m13s
-1535-Jan-15	06:21:41	35805	2011	-43722	26	T	p-	-0.4305	1.0308	49S	123W	64	115	02m27s
-1535-Jul-11	13:51:49	35795	2009	-43716	31	A	p-	0.5196	0.9449	55N	117E	58	238	05m19s
-1534-Jan-04	21:53:54	35785	2008	-43710	36	P	t-	-1.0934	0.8349	66S	166W	0		
-1534-Jun-01	00:37:47	35776	2006	-43705	3	Pe	-t	-1.5384	0.0284	63S	4E	0		
-1534-Jun-30	14:16:37	35774	2006	-43704	41	P	t-	1.2603	0.5173	65N	46W	0		
-1534-Nov-26	00:26:43	35766	2005	-43699	8	A	-t	0.9652	0.9786	51N	6W	15	293	01m44s
-1533-May-21	09:16:13	35755	2003	-43693	13	T	-p	-0.7082	1.0266	25S	155W	45	126	02m27s
-1533-Nov-15	06:44:22	35745	2002	-43687	18	A	-n	0.2984	0.9374	1N	127W	73	242	07m26s
-1532-May-10	00:15:47	35735	2000	-43681	23	T	nn	0.0713	1.0758	17N	39W	86	246	06m12s
-1532-Nov-03	06:38:51	35724	1998	-43675	28	A	p-	-0.3857	0.9154	31S	145W	67	346	09m11s
-1531-Apr-29	17:34:30	35714	1997	-43669	33	T	p-	0.8125	1.0672	54N	24E	35	371	04m13s
-1531-Oct-23	06:43:30	35704	1995	-43663	38	P	t-	-1.0496	0.8746	61S	124E	0		
-1530-Mar-20	22:06:39	35695	1994	-43658	5	P	-t	-1.0499	0.8953	61S	100E	0		
-1530-Sep-13	01:30:20	35685	1993	-43652	10	P	-t	1.0769	0.8591	61N	54E	0		
-1529-Mar-10	02:41:17	35674	1991	-43646	15	A	-p	-0.3222	0.9466	26S	58W	71	206	05m38s
-1529-Sep-02	17:04:55	35664	1989	-43640	20	T	-n	0.3646	1.0588	32N	84E	68	207	04m29s
-1528-Feb-27	02:44:54	35654	1988	-43634	25	A	p-	0.4141	0.9385	9N	78W	65	248	07m24s
-1528-Aug-22	08:56:47	35643	1986	-43628	30	T	n-	-0.3416	1.0390	2S	173W	70	139	03m37s
-1527-Feb-15	05:44:01	35633	1985	-43622	35	P	t-	1.1211	0.7622	62N	167W	0		
-1527-Aug-11	20:31:20	35623	1983	-43616	40	P	t-	-1.1172	0.7730	63S	25W	0		
-1526-Jan-06	05:21:25	35614	1982	-43611	7	T	-p	-0.9182	1.0302	84S	13W	23	263	01m39s
-1526-Jul-02	09:26:24	35604	1980	-43605	12	A	-t	0.9645	0.9346	80N	15W	15	968	04m11s
-1526-Dec-26	21:11:39	35593	1979	-43599	17	T	-n	-0.2395	1.0466	38S	12E	76	160	03m54s

-1525-Jun-21	10:29:19	35583	1977	-43593	22	A	nn	0.1973	0.9649	34N	168E	78	129	03m58s
-1525-Dec-16	11:19:14	35573	1976	-43587	27	H	n-	0.4532	1.0044	4N	159E	63	17	00m29s
-1524-Jun-09	17:28:19	35562	1974	-43581	32	T	p-	-0.5782	1.0148	14S	67E	55	62	01m37s
-1524-Dec-04	19:26:39	35552	1973	-43575	37	P	t-	1.1976	0.6243	68N	54E	0		
-1523-May-01	00:39:27	35543	1971	-43570	4	P	-t	1.2095	0.6176	71N	164W	0		
-1523-May-30	07:22:12	35542	1971	-43569	42	P	t-	-1.2930	0.4561	69S	119W	0		
-1523-Oct-25	00:55:07	35533	1970	-43564	9	P	-t	-1.1615	0.6800	71S	161W	0		
-1522-Apr-20	17:45:12	35523	1968	-43558	14	T	-p	0.4885	1.0625	34N	52E	61	234	05m05s
-1522-Oct-14	02:29:18	35512	1967	-43552	19	A	-n	-0.4466	0.9544	28S	80W	63	185	04m55s
-1521-Apr-10	07:10:53	35502	1965	-43546	24	H	nn	-0.2758	1.0111	13S	134W	74	40	01m09s
-1521-Oct-03	11:21:42	35492	1964	-43540	29	H	n-	0.2733	1.0131	17N	162E	74	47	01m16s
-1520-Mar-29	13:31:49	35481	1962	-43534	34	P	t-	-1.0789	0.8306	72S	137W	0		
-1520-Sep-22	01:58:55	35471	1961	-43528	39	T	t-	0.9414	1.0400	68N	12W	19	404	02m24s
-1519-Feb-16	22:09:27	35463	1959	-43523	6	P	-t	1.0857	0.8140	70N	36W	0		
-1519-Aug-13	07:58:53	35452	1958	-43517	11	P	-t	-1.0197	0.9639	69S	177W	0		
-1518-Feb-06	02:54:32	35442	1956	-43511	16	A	-n	0.3190	0.9871	1S	74W	71	48	01m31s
-1518-Aug-02	17:45:21	35432	1955	-43505	21	A	-p	-0.3065	0.9756	4N	60E	72	92	03m03s
-1517-Jan-26	14:42:46	35421	1953	-43499	26	T	n-	-0.4086	1.0364	46S	114E	66	134	02m56s
-1517-Jul-22	20:31:45	35411	1952	-43493	31	A	p-	0.4489	0.9418	50N	20E	63	241	05m59s
-1516-Jan-16	06:29:39	35401	1950	-43487	36	P	t-	-1.0792	0.8624	67S	53E	0		
-1516-Jul-10	20:54:46	35390	1949	-43481	41	P	t-	1.1842	0.6480	66N	157W	0		
-1516-Dec-06	09:01:54	35382	1947	-43476	8	A	-t	0.9685	0.9763	51N	142W	14	346	01m59s
-1515-May-31	16:21:24	35372	1946	-43470	13	T	-p	-0.7828	1.0283	29S	97E	38	152	02m35s
-1515-Nov-25	14:57:22	35361	1944	-43464	18	A	-n	0.3003	0.9353	2S	107E	73	251	08m00s
-1514-May-21	07:38:28	35351	1943	-43458	23	T	nn	-0.0040	1.0776	16N	150W	90	251	06m29s
-1514-Nov-14	14:38:48	35341	1941	-43452	28	A	p-	-0.3810	0.9151	35S	94E	67	348	09m12s
-1513-May-11	00:57:28	35330	1940	-43446	33	T	p-	0.7402	1.0679	54N	82W	42	326	04m23s
-1513-Nov-03	14:54:52	35320	1938	-43440	38	P	t-	-1.0427	0.8867	61S	9W	0		
-1512-Mar-31	05:13:18	35311	1937	-43435	5	P	-t	-1.1197	0.7700	61S	17W	0		
-1512-Apr-29	15:37:27	35310	1937	-43434	43	Pb	t-	1.5388	0.0036	61N	16W	0		
-1512-Sep-23	09:53:44	35301	1935	-43429	10	P	-t	1.0932	0.8287	61N	82W	0		
-1511-Mar-20	09:30:06	35291	1934	-43423	15	A	-p	-0.3893	0.9473	26S	160W	67	208	05m31s
-1511-Sep-13	01:27:28	35281	1932	-43417	20	T	-n	0.3908	1.0555	30N	43W	67	198	04m15s

-1510-Mar-09	09:40:03	35270	1931	-43411	25	A	p-	0.3542	0.9430	9N	177E	69	223	06m36s
-1510-Sep-02	17:02:36	35260	1929	-43405	30	T	n-	-0.3094	1.0334	3S	64E	72	118	03m02s
-1509-Feb-26	13:10:47	35250	1928	-43399	35	P	t-	1.0722	0.8505	61N	71E	0		
-1509-Aug-23	04:04:44	35239	1926	-43393	40	P	t-	-1.0777	0.8413	62S	150W	0		
-1508-Jan-17	13:51:43	35231	1925	-43388	7	T	-p	-0.9329	1.0340	79S	137W	21	325	01m49s
-1508-Jul-12	15:59:01	35221	1924	-43382	12	P	-t	1.0397	0.8920	65N	113W	0		
-1507-Jan-06	05:51:20	35210	1922	-43376	17	T	-n	-0.2507	1.0479	38S	117W	75	165	03m57s
-1507-Jul-01	17:08:46	35200	1920	-43370	22	A	nn	0.2748	0.9653	40N	69E	74	131	03m43s
-1507-Dec-26	19:53:15	35190	1919	-43364	27	H	n-	0.4494	1.0034	3N	28E	63	13	00m22s
-1506-Jun-21	00:31:33	35179	1917	-43358	32	T	p-	-0.5009	1.0180	7S	43W	60	71	02m00s
-1506-Dec-16	03:41:38	35169	1916	-43352	37	P	t-	1.1976	0.6242	67N	83W	0		
-1505-May-12	08:03:49	35161	1915	-43347	4	P	-t	1.2808	0.4792	70N	70E	0		
-1505-Jun-10	14:43:08	35159	1914	-43346	42	P	t-	-1.2179	0.6007	68S	118E	0		
-1505-Nov-05	08:55:40	35150	1913	-43341	9	P	-t	-1.1646	0.6750	71S	64E	0		
-1504-May-01	01:06:08	35140	1912	-43335	14	T	-p	0.5627	1.0604	43N	63W	56	239	04m40s
-1504-Oct-24	10:44:25	35130	1910	-43329	19	A	-n	-0.4505	0.9555	33S	154E	63	181	04m38s
-1503-Apr-20	14:14:22	35120	1909	-43323	24	H	nn	-0.2039	1.0095	5S	116E	78	33	01m01s
-1503-Oct-13	19:53:15	35109	1907	-43317	29	H	n-	0.2638	1.0138	12N	31E	75	49	01m22s
-1502-Apr-09	20:12:55	35099	1906	-43311	34	A-	t-	-1.0081	0.9530	72S	107E	0		
-1502-Oct-03	10:35:08	35089	1904	-43305	39	T	p-	0.9269	1.0388	63N	154W	22	350	02m28s
-1501-Feb-28	05:18:16	35080	1903	-43300	6	P	-t	1.1329	0.7348	71N	157W	0		
-1501-Aug-24	15:51:11	35070	1901	-43294	11	P	-t	-1.0617	0.8835	70S	51E	0		
-1500-Feb-17	10:37:06	35060	1900	-43288	16	A	-n	0.3561	0.9934	4N	168E	69	25	00m45s
-1500-Aug-13	01:04:15	35049	1898	-43282	21	A	-p	-0.3580	0.9692	2S	52W	69	119	03m52s

15TH CENTURY BCE

In the 15th century BCE the total number of solar eclipses was 226 solar eclipses:
77 partial solar eclipses, 69 annular solar eclipses (63 central annular solar eclipses

with two limits, 2 central annular solar eclipses with one limit, 4 non-central annular solar eclipses with one limit), 62 total solar eclipses (60 central total solar eclipses with two limits, 1 central total solar eclipses with one limit, 1 non-central total solar eclipses with one limit), 18 hybrid solar eclipses.

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°	°	ALT	WIDTH	DUR.
	GREATEST		S									°	km	
ECLIPSE														
-1499-Feb-05	22:54:33	35039	1897	-43276	26	T	n-	-0.3785	1.0421	42S	9W	68	152	03m28s
-1499-Aug-02	03:21:32	35029	1895	-43270	31	A	p-	0.3866	0.9386	44N	81W	67	248	06m42s
-1498-Jan-26	14:56:51	35019	1894	-43264	36	P	t-	-1.0586	0.9025	68S	86W	0		
-1498-Jul-22	03:41:30	35009	1892	-43258	41	P	t-	1.1141	0.7683	67N	89E	0		
-1498-Dec-17	17:32:50	35000	1891	-43253	8	A	-t	0.9745	0.9742	53N	83E	12	426	02m11s
-1497-Jun-11	23:29:08	34990	1889	-43247	13	T	-p	-0.8559	1.0290	35S	12W	31	189	02m35s
-1497-Dec-06	23:08:05	34979	1888	-43241	18	A	-n	0.3038	0.9340	4S	17W	72	257	08m30s
-1496-May-31	15:00:06	34969	1886	-43235	23	Tm	nn	-0.0805	1.0785	15N	100E	85	254	06m44s
-1496-Nov-24	22:40:42	34959	1885	-43229	28	A	p-	-0.3777	0.9155	39S	27W	68	346	09m09s
-1495-May-21	08:17:58	34949	1883	-43223	33	T	p-	0.6659	1.0676	54N	173E	48	294	04m29s
-1495-Nov-13	23:10:08	34939	1882	-43217	38	P	t-	-1.0382	0.8951	62S	143W	0		
-1494-Apr-11	12:12:34	34930	1881	-43212	5	P	-t	-1.1945	0.6359	61S	132W	0		
-1494-May-10	22:39:45	34928	1880	-43211	43	P	t-	1.4690	0.1337	62N	132W	0		
-1494-Oct-04	18:25:10	34920	1879	-43206	10	P	-t	1.1037	0.8091	61N	140E	0		
-1493-Mar-31	16:10:25	34910	1878	-43200	15	A	-p	-0.4629	0.9479	25S	100E	62	213	05m27s
-1493-Sep-24	09:57:27	34899	1876	-43194	20	T	-n	0.4109	1.0522	26N	171W	66	188	04m03s
-1492-Mar-19	16:27:58	34889	1875	-43188	25	A	pn	0.2879	0.9476	9N	74E	73	200	05m53s
-1492-Sep-13	01:15:29	34879	1873	-43182	30	T	n-	-0.2834	1.0277	5S	61W	74	97	02m29s
-1491-Mar-08	20:31:04	34869	1872	-43176	35	P	t-	1.0166	0.9517	61N	50W	0		
-1491-Sep-02	11:45:55	34858	1870	-43170	40	P	t-	-1.0449	0.8967	61S	85E	0		
-1490-Jan-27	22:15:58	34850	1869	-43165	7	T	-p	-0.9534	1.0375	74S	99E	17	430	01m58s
-1490-Jul-23	22:38:34	34840	1867	-43159	12	P	-t	1.1092	0.7733	64N	135E	0		

-1489-Jan-17	14:24:49	34829	1866	-43153	17	T	-n	-0.2671	1.0493	38S	116E	74	170	04m00s
-1489-Jul-12	23:55:46	34819	1864	-43147	22	A	-n	0.3471	0.9653	44N	31W	69	134	03m31s
-1488-Jan-07	04:19:12	34809	1863	-43141	27	H	n-	0.4396	1.0028	2N	101W	64	11	00m18s
-1488-Jul-01	07:41:31	34799	1861	-43135	32	T	p-	-0.4280	1.0204	2S	153W	65	77	02m15s
-1488-Dec-26	11:49:33	34788	1860	-43129	37	P	t-	1.1923	0.6333	66N	142E	0		
-1487-May-22	15:28:22	34780	1859	-43124	4	P	-t	1.3519	0.3407	70N	55W	0		
-1487-Jun-20	22:09:10	34778	1858	-43123	42	P	t-	-1.1464	0.7385	67S	6W	0		
-1487-Nov-15	16:57:42	34770	1857	-43118	9	P	-t	-1.1668	0.6714	70S	71W	0		
-1486-May-12	08:24:42	34760	1856	-43112	14	T	-p	0.6383	1.0573	52N	178W	50	245	04m10s
-1486-Nov-04	19:04:45	34749	1854	-43106	19	A	-n	-0.4511	0.9573	37S	28E	63	174	04m19s
-1485-May-01	21:10:32	34739	1853	-43100	24	Hm	nn	-0.1265	1.0072	3N	8E	83	25	00m47s
-1485-Oct-25	04:32:21	34729	1851	-43094	29	H	n-	0.2598	1.0149	7N	101W	75	53	01m29s
-1484-Apr-20	02:45:06	34719	1850	-43088	34	A	t-	-0.9299	0.9493	58S	45W	21	506	04m24s
-1484-Oct-13	19:18:51	34709	1848	-43082	39	T	p-	0.9185	1.0376	59N	66E	23	320	02m30s
-1483-Mar-10	12:18:02	34700	1847	-43077	6	P	-t	1.1879	0.6414	71N	83E	0		
-1483-Sep-03	23:52:00	34690	1845	-43071	11	P	-t	-1.0962	0.8181	71S	84W	0		
-1482-Feb-27	18:13:37	34680	1844	-43065	16	A	-n	0.3992	0.9997	10N	50E	66	1	00m02s
-1482-Aug-24	08:29:18	34669	1842	-43059	21	A	-p	-0.4035	0.9628	7S	167W	66	147	04m37s
-1481-Feb-17	07:00:48	34659	1841	-43053	26	T	n-	-0.3431	1.0480	36S	131W	70	170	04m01s
-1481-Aug-13	10:18:05	34649	1839	-43047	31	A	p-	0.3300	0.9351	38N	174E	71	256	07m27s
-1480-Feb-06	23:16:32	34639	1838	-43041	36	P	t-	-1.0318	0.9544	69S	135E	0		
-1480-Aug-01	10:37:17	34629	1836	-43035	41	P	t-	1.0502	0.8775	68N	28W	0		
-1480-Dec-28	01:58:39	34620	1835	-43030	8	A	-t	0.9842	0.9722	56N	50W	9	606	02m20s
-1479-Jun-22	06:42:51	34610	1834	-43024	13	T	-p	-0.9251	1.0286	44S	124W	22	256	02m25s
-1479-Dec-17	07:13:56	34600	1832	-43018	18	A	-n	0.3107	0.9332	5S	140W	72	262	08m55s
-1478-Jun-11	22:25:54	34590	1831	-43012	23	T	nn	-0.1540	1.0785	13N	12W	81	257	06m57s
-1478-Dec-06	06:40:50	34579	1829	-43006	28	A	p-	-0.3728	0.9165	42S	146W	68	342	09m04s
-1477-Jun-01	15:37:56	34569	1828	-43000	33	T	p-	0.5916	1.0662	53N	68E	53	267	04m33s
-1477-Nov-25	07:26:58	34559	1826	-42994	38	P	t-	-1.0342	0.9029	62S	82E	0		
-1476-Apr-21	19:04:24	34551	1825	-42989	5	P	-t	-1.2739	0.4941	61S	115E	0		
-1476-May-21	05:39:06	34549	1825	-42988	43	P	t-	1.3977	0.2660	62N	112E	0		
-1476-Oct-15	03:03:26	34540	1823	-42983	10	P	-t	1.1095	0.7986	61N	0W	0		
-1475-Apr-10	22:42:46	34530	1822	-42977	15	A	-p	-0.5424	0.9478	26S	1E	57	223	05m30s

-1475-Oct-04	18:35:14	34520	1820	-42971	20	T	-n	0.4244	1.0492	22N	57E	65	179	03m53s
-1474-Mar-30	23:09:07	34510	1819	-42965	25	A	nn	0.2151	0.9519	9N	28W	78	180	05m17s
-1474-Sep-24	09:35:30	34500	1817	-42959	30	T	n-	-0.2640	1.0222	9S	172E	75	78	01m58s
-1473-Mar-20	03:44:35	34490	1816	-42953	35	A	t-	0.9543	0.9823	54N	140W	17	208	01m19s
-1473-Sep-13	19:35:02	34479	1814	-42947	40	P	t-	-1.0193	0.9390	61S	43W	0		
-1472-Feb-08	06:31:09	34471	1813	-42942	7	T	-t	-0.9819	1.0401	69S	17W	10	766	02m01s
-1472-Aug-03	05:26:53	34461	1812	-42936	12	P	-t	1.1712	0.6677	63N	22E	0		
-1471-Jan-27	22:50:11	34451	1810	-42930	17	T	-n	-0.2903	1.0508	38S	9W	73	176	04m04s
-1471-Jul-23	06:51:46	34440	1809	-42924	22	A	-p	0.4126	0.9650	47N	132W	65	139	03m23s
-1470-Jan-17	12:38:05	34430	1807	-42918	27	H	n-	0.4247	1.0025	2N	132E	65	10	00m16s
-1470-Jul-12	14:58:50	34420	1806	-42912	32	T	p-	-0.3601	1.0221	3N	95E	69	81	02m24s
-1469-Jan-06	19:51:51	34410	1804	-42906	37	P	t-	1.1832	0.6487	65N	10E	0		
-1469-Jun-02	22:52:07	34402	1803	-42901	4	P	-t	1.4236	0.2012	69N	179W	0		
-1469-Jul-02	05:38:21	34400	1803	-42900	42	P	t-	-1.0771	0.8720	66S	131W	0		
-1469-Nov-27	01:02:11	34391	1802	-42895	9	P	-t	-1.1673	0.6709	69S	153E	0		
-1468-May-22	15:40:46	34381	1800	-42889	14	T	-p	0.7155	1.0533	62N	69E	44	253	03m37s
-1468-Nov-15	03:28:24	34371	1799	-42883	19	A	-n	-0.4497	0.9596	41S	99W	63	164	03m59s
-1467-May-12	04:03:32	34361	1797	-42877	24	H	nn	-0.0476	1.0043	11N	99W	87	15	00m28s
-1467-Nov-04	13:15:23	34351	1796	-42871	29	H2	n-	0.2582	1.0164	3N	126E	75	58	01m39s
-1466-May-01	09:13:18	34341	1794	-42865	34	A	p-	-0.8490	0.9511	45S	157W	32	336	04m54s
-1466-Oct-25	04:06:23	34330	1793	-42859	39	T	p-	0.9134	1.0365	55N	73W	24	302	02m33s
-1465-Mar-21	19:12:01	34322	1792	-42854	6	P	-t	1.2478	0.5385	72N	36W	0		
-1465-Sep-15	07:59:34	34312	1790	-42848	11	P	-t	-1.1241	0.7655	71S	139E	0		
-1464-Mar-10	01:41:28	34302	1789	-42842	16	H	-p	0.4502	1.0058	16N	66W	63	22	00m36s
-1464-Sep-03	16:02:58	34292	1787	-42836	21	A	-p	-0.4407	0.9566	13S	76E	64	175	05m17s
-1463-Feb-27	14:58:03	34281	1786	-42830	26	T	n-	-0.3000	1.0537	30S	108E	72	186	04m36s
-1463-Aug-23	17:24:35	34271	1784	-42824	31	A	nn	0.2818	0.9318	32N	66E	73	266	08m10s
-1462-Feb-17	07:27:08	34261	1783	-42818	36	T-	t-	-0.9982	1.0198	70S	1W	0		
-1462-Aug-12	17:43:57	34251	1781	-42812	41	An	t-	0.9945	0.9375	73N	153W	4	-	03m45s
-1461-Jan-08	10:16:52	34243	1780	-42807	8	A+	-t	0.9992	0.9808	66N	179E	0		
-1461-Jul-03	14:00:58	34232	1779	-42801	13	Ts	-t	-0.9912	1.0252	59S	125E	6	-	01m52s
-1461-Dec-28	15:14:39	34222	1777	-42795	18	A	-n	0.3211	0.9331	5S	98E	71	263	09m12s
-1460-Jun-22	05:53:54	34212	1776	-42789	23	T	-n	-0.2255	1.0776	10N	125W	77	257	07m04s

-1460-Dec-16	14:38:13	34202	1774	-42783	28	A	p-	-0.3655	0.9183	44S	96E	68	333	08m56s
-1459-Jun-11	22:58:39	34192	1773	-42777	33	T	p-	0.5186	1.0638	52N	38W	59	244	04m34s
-1459-Dec-05	15:44:48	34182	1771	-42771	38	P	t-	-1.0306	0.9103	63S	53W	0		
-1458-May-03	01:50:34	34173	1770	-42766	5	P	-t	-1.3566	0.3468	61S	3E	0		
-1458-Jun-01	12:36:07	34172	1770	-42765	43	P	t-	1.3251	0.3999	63N	3W	0		
-1458-Oct-26	11:47:13	34163	1768	-42760	10	P	-t	1.1113	0.7953	61N	142W	0		
-1457-Apr-22	05:09:25	34153	1767	-42754	15	A	-p	-0.6259	0.9475	27S	96W	51	241	05m36s
-1457-Oct-16	03:18:47	34143	1766	-42748	20	T	-n	0.4333	1.0465	19N	76W	64	170	03m46s
-1456-Apr-10	05:44:24	34133	1764	-42742	25	A	nn	0.1368	0.9560	10N	127W	82	162	04m47s
-1456-Oct-04	18:01:55	34123	1763	-42736	30	H3	n-	-0.2504	1.0169	12S	43E	75	60	01m30s
-1455-Mar-30	10:53:54	34113	1761	-42730	35	A	t-	0.8871	0.9909	50N	119E	27	67	00m42s
-1455-Sep-24	03:30:10	34102	1760	-42724	40	A-	p-	-0.9992	0.9714	61S	172W	0		
-1454-Feb-18	14:39:52	34094	1758	-42719	7	P	-t	-1.0162	0.9849	62S	131W	0		
-1454-Aug-14	12:24:30	34084	1757	-42713	12	P	-t	1.2256	0.5756	62N	93W	0		
-1453-Feb-08	07:07:05	34074	1756	-42707	17	T	-n	-0.3203	1.0523	36S	132W	71	183	04m07s
-1453-Aug-03	13:57:11	34064	1754	-42701	22	A	-p	0.4712	0.9644	48N	125E	62	145	03m18s
-1452-Jan-28	20:47:07	34054	1753	-42695	27	H	n-	0.4023	1.0025	2N	8E	66	9	00m16s
-1452-Jul-22	22:25:19	34044	1751	-42689	32	T	n-	-0.2988	1.0233	6N	18W	73	83	02m27s
-1451-Jan-17	03:43:12	34033	1750	-42683	37	P	t-	1.1657	0.6787	64N	119W	0		
-1451-Jun-13	06:19:02	34025	1748	-42678	4	Pe	-t	1.4928	0.0669	68N	56E	0		
-1451-Jul-12	13:15:12	34023	1748	-42677	42	P	t-	-1.0136	0.9941	65S	103E	0		
-1451-Dec-07	09:05:01	34015	1747	-42672	9	P	-t	-1.1698	0.6671	68S	19E	0		
-1450-Jun-02	22:55:44	34005	1746	-42666	14	T	-p	0.7928	1.0482	71N	44W	37	265	03m03s
-1450-Nov-26	11:53:41	33995	1744	-42660	19	A	-n	-0.4479	0.9626	45S	135E	63	151	03m36s
-1449-May-23	10:52:05	33985	1743	-42654	24	H	nn	0.0344	1.0008	19N	156E	88	3	00m05s
-1449-Nov-15	22:01:46	33975	1741	-42648	29	T	n-	0.2592	1.0185	1S	8W	75	65	01m53s
-1448-May-11	15:35:27	33964	1740	-42642	34	A	p-	-0.7633	0.9518	35S	99E	40	271	05m26s
-1448-Nov-04	12:58:55	33954	1738	-42636	39	T	p-	0.9125	1.0357	52N	147E	24	294	02m36s
-1447-Apr-01	01:59:25	33946	1737	-42631	6	P	-t	1.3133	0.4250	72N	153W	0		
-1447-Apr-30	16:13:20	33944	1737	-42630	44	Pb	t-	-1.5170	0.0757	71S	136E	0		
-1447-Sep-25	16:13:54	33936	1736	-42625	11	P	-t	-1.1457	0.7249	72S	0E	0		
-1446-Mar-21	09:04:35	33926	1734	-42619	16	H	-p	0.5060	1.0117	24N	179E	59	46	01m09s
-1446-Sep-14	23:43:57	33916	1733	-42613	21	A	-p	-0.4710	0.9508	19S	43W	62	203	05m50s

-1445-Mar-10	22:48:48	33906	1731	-42607	26	T	n-	-0.2508	1.0593	23S	12W	75	201	05m10s
-1445-Sep-04	00:39:30	33895	1730	-42601	31	A	nn	0.2405	0.9286	26N	44W	76	276	08m51s
-1444-Feb-28	15:30:01	33885	1728	-42595	36	T	t-	-0.9582	1.0513	76S	169E	16	615	02m48s
-1444-Aug-23	01:00:55	33875	1727	-42589	41	A	t-	0.9462	0.9403	78N	25E	18	702	04m06s
-1443-Jan-18	18:26:30	33867	1726	-42584	8	P	-t	1.0205	0.9428	67N	44E	0		
-1443-Jul-13	21:27:42	33857	1724	-42578	13	P	-t	-1.0509	0.9114	66S	5E	0		
-1442-Jan-07	23:08:08	33847	1723	-42572	18	A	-p	0.3367	0.9334	4S	22W	70	264	09m20s
-1442-Jul-03	13:26:43	33837	1721	-42566	23	T	-n	-0.2931	1.0760	7N	120E	73	257	07m05s
-1442-Dec-27	22:30:42	33827	1720	-42560	28	A	p-	-0.3541	0.9207	44S	20W	69	321	08m46s
-1441-Jun-23	06:21:37	33817	1718	-42554	33	T	p-	0.4480	1.0606	49N	144W	63	223	04m32s
-1441-Dec-16	23:59:12	33807	1717	-42548	38	P	t-	-1.0233	0.9244	64S	172E	0		
-1440-May-13	08:31:52	33798	1716	-42543	5	P	-t	-1.4419	0.1957	62S	108W	0		
-1440-Jun-11	19:33:21	33796	1715	-42542	43	P	t-	1.2533	0.5312	63N	118W	0		
-1440-Nov-05	20:34:59	33788	1714	-42537	10	P	-t	1.1106	0.7968	61N	76E	0		
-1439-May-02	11:31:26	33778	1713	-42531	15	A	-p	-0.7128	0.9465	30S	169E	44	272	05m46s
-1439-Oct-26	12:06:27	33768	1711	-42525	20	T	-n	0.4387	1.0443	15N	149E	64	163	03m41s
-1438-Apr-21	12:16:00	33758	1710	-42519	25	A	nn	0.0547	0.9598	10N	135E	87	146	04m24s
-1438-Oct-16	02:34:32	33748	1708	-42513	30	H	n-	-0.2427	1.0121	16S	87W	76	43	01m04s
-1437-Apr-10	17:56:45	33738	1707	-42507	35	A	p-	0.8134	0.9987	48N	16E	35	8	00m06s
-1437-Oct-05	11:33:07	33728	1706	-42501	40	As	p-	-0.9862	0.9459	59S	74E	9	-	03m49s
-1436-Feb-29	22:39:25	33719	1704	-42496	7	P	-t	-1.0584	0.9062	61S	99E	0		
-1436-Mar-30	06:40:36	33718	1704	-42495	45	Pb	t-	1.5036	0.0567	61N	135E	0		
-1436-Aug-24	19:32:25	33709	1703	-42490	12	P	-t	1.2717	0.4981	62N	150E	0		
-1435-Feb-18	15:14:45	33699	1701	-42484	17	T	-n	-0.3578	1.0536	35S	107E	69	189	04m10s
-1435-Aug-13	21:13:38	33689	1700	-42478	22	A	-p	0.5216	0.9637	48N	19E	58	153	03m16s
-1434-Feb-08	04:47:50	33679	1699	-42472	27	H	n-	0.3737	1.0026	2N	114W	68	10	00m16s
-1434-Aug-03	05:59:00	33669	1697	-42466	32	T	n-	-0.2426	1.0240	8N	133W	76	84	02m26s
-1433-Jan-28	11:27:10	33659	1696	-42460	37	P	t-	1.1430	0.7178	63N	114E	0		
-1433-Jul-23	20:57:16	33649	1694	-42454	42	T	t-	-0.9539	1.0553	48S	12W	17	616	04m08s
-1433-Dec-18	17:05:32	33641	1693	-42449	9	P	-t	-1.1742	0.6604	67S	114W	0		
-1432-Jun-13	06:10:56	33630	1692	-42443	14	T	-t	0.8690	1.0420	82N	160W	29	288	02m28s
-1432-Dec-06	20:18:37	33620	1690	-42437	19	A	-n	-0.4472	0.9662	48S	11E	63	136	03m10s
-1431-Jun-02	17:40:24	33610	1689	-42431	24	A	nn	0.1152	0.9967	27N	51E	83	12	00m22s

-1431-Nov-26	06:47:50	33600	1687	-42425	29	T	n-	0.2593	1.0210	4S	141W	75	74	02m10s
-1430-May-22	21:57:19	33590	1686	-42419	34	A	p-	-0.6776	0.9517	25S	3W	47	239	05m58s
-1430-Nov-15	21:52:35	33580	1684	-42413	39	T	p-	0.9128	1.0353	49N	7E	24	292	02m39s
-1429-Apr-12	08:41:39	33572	1683	-42408	6	P	-t	1.3831	0.3026	72N	90E	0		
-1429-May-11	22:34:06	33570	1683	-42407	44	P	t-	-1.4306	0.2237	70S	26E	0		
-1429-Oct-07	00:34:28	33562	1682	-42402	11	P	-t	-1.1614	0.6954	72S	141W	0		
-1428-Mar-31	16:21:16	33552	1680	-42396	16	T	-p	0.5681	1.0171	32N	64E	55	71	01m34s
-1428-Sep-25	07:32:38	33542	1679	-42390	21	A	-p	-0.4941	0.9454	24S	163W	60	230	06m17s
-1427-Mar-21	06:31:53	33532	1677	-42384	26	T	n-	-0.1946	1.0643	16S	132W	79	214	05m41s
-1427-Sep-14	08:05:06	33522	1676	-42378	31	A	nn	0.2081	0.9256	20N	158W	78	286	09m27s
-1426-Mar-10	23:24:13	33512	1675	-42372	36	T	p-	-0.9115	1.0557	68S	17E	24	451	03m20s
-1426-Sep-03	08:28:26	33502	1673	-42366	41	A	t-	0.9057	0.9410	72N	120W	25	520	04m24s
-1425-Jan-30	02:26:51	33493	1672	-42361	8	P	-t	1.0484	0.8932	68N	89W	0		
-1425-Jul-25	05:01:27	33483	1671	-42355	13	P	-t	-1.1052	0.8095	67S	121W	0		
-1424-Jan-19	06:52:09	33473	1669	-42349	18	A	-p	0.3594	0.9342	2S	141W	69	263	09m17s
-1424-Jul-13	21:04:45	33463	1668	-42343	23	T	-n	-0.3562	1.0736	3N	3E	69	256	06m58s
-1423-Jan-07	06:17:43	33453	1666	-42337	28	A	n-	-0.3383	0.9238	44S	134W	70	306	08m33s
-1423-Jul-03	13:47:36	33443	1665	-42331	33	T	n-	0.3806	1.0566	46N	107E	67	202	04m27s
-1423-Dec-27	08:11:08	33433	1663	-42325	38	A-	t-	-1.0133	0.9436	65S	38E	0		
-1422-May-24	15:10:51	33425	1662	-42320	5	Pe	-t	-1.5275	0.0450	62S	142E	0		
-1422-Jun-23	02:31:33	33423	1662	-42319	43	P	t-	1.1830	0.6584	64N	126E	0		
-1422-Nov-17	05:25:37	33415	1661	-42314	10	P	-t	1.1081	0.8018	62N	67W	0		
-1421-May-13	17:49:18	33405	1659	-42308	15	A	-p	-0.8024	0.9448	34S	74E	36	331	05m56s
-1421-Nov-06	20:58:15	33395	1658	-42302	20	T	-n	0.4406	1.0425	11N	14E	64	157	03m39s
-1420-May-01	18:45:03	33385	1656	-42296	25	A	nn	-0.0299	0.9631	9N	37E	88	133	04m05s
-1420-Oct-26	11:10:34	33375	1655	-42290	30	H	n-	-0.2386	1.0077	21S	142E	76	27	00m41s
-1419-Apr-21	00:57:58	33365	1654	-42284	35	H	p-	0.7373	1.0056	47N	86W	42	28	00m26s
-1419-Oct-15	19:40:53	33355	1652	-42278	40	A	p-	-0.9782	0.9420	60S	52W	11	1066	04m02s
-1418-Mar-12	06:32:51	33347	1651	-42273	7	P	-t	-1.1060	0.8163	61S	30W	0		
-1418-Apr-10	14:10:03	33345	1651	-42272	45	P	t-	1.4372	0.1815	61N	13E	0		
-1418-Sep-05	02:49:04	33337	1650	-42267	12	P	-t	1.3106	0.4328	61N	30E	0		
-1417-Mar-01	23:13:52	33327	1648	-42261	17	T	-p	-0.4021	1.0546	33S	13W	66	196	04m12s
-1417-Aug-25	04:40:25	33317	1647	-42255	22	A	-p	0.5644	0.9630	46N	91W	55	161	03m16s

-1416-Feb-19	12:36:13	33307	1645	-42249	27	H	n-	0.3357	1.0027	2N	127E	70	10	00m16s
-1416-Aug-13	13:43:35	33297	1644	-42243	32	T	n-	-0.1947	1.0243	8N	110E	79	84	02m23s
-1415-Feb-07	18:59:07	33287	1642	-42237	37	P	t-	1.1107	0.7731	62N	10W	0		
-1415-Aug-03	04:47:41	33277	1641	-42231	42	T	t-	-0.9010	1.0560	41S	133W	25	423	04m22s
-1415-Dec-29	01:00:30	33268	1640	-42226	9	P	-t	-1.1835	0.6454	66S	115E	0		
-1414-Jun-24	13:28:06	33258	1638	-42220	14	T	-t	0.9428	1.0344	86N	71W	19	358	01m52s
-1414-Dec-18	04:41:31	33248	1637	-42214	19	A	-n	-0.4489	0.9705	50S	113W	63	119	02m42s
-1413-Jun-14	00:26:26	33238	1636	-42208	24	A	nn	0.1969	0.9919	34N	51W	78	29	00m51s
-1413-Dec-07	15:34:26	33228	1634	-42202	29	T	n-	0.2594	1.0242	6S	85E	75	85	02m29s
-1412-Jun-02	04:17:03	33218	1633	-42196	34	A	p-	-0.5902	0.9509	16S	104W	54	222	06m30s
-1412-Nov-26	06:47:01	33208	1631	-42190	39	T	p-	0.9138	1.0353	47N	133W	24	295	02m44s
-1411-Apr-22	15:20:25	33200	1630	-42185	6	P	-t	1.4561	0.1737	71N	24W	0		
-1411-May-22	04:54:57	33198	1630	-42184	44	P	t-	-1.3430	0.3744	70S	84W	0		
-1411-Oct-17	09:00:59	33190	1629	-42179	11	P	-t	-1.1717	0.6759	72S	77E	0		
-1410-Apr-11	23:34:23	33180	1627	-42173	16	T	-p	0.6339	1.0220	40N	49W	50	96	01m52s
-1410-Oct-06	15:27:25	33170	1626	-42167	21	A	-p	-0.5113	0.9405	29S	75E	59	255	06m39s
-1409-Apr-01	14:09:52	33160	1624	-42161	26	T	n-	-0.1338	1.0690	8S	110E	82	227	06m09s
-1409-Sep-25	15:38:52	33150	1623	-42155	31	A	nn	0.1826	0.9229	14N	86E	79	296	10m00s
-1408-Mar-21	07:10:27	33140	1622	-42149	36	T	p-	-0.8587	1.0592	59S	115W	30	380	03m51s
-1408-Sep-13	16:06:39	33130	1620	-42143	41	A	p-	0.8733	0.9414	65N	112E	29	445	04m41s
-1407-Feb-09	10:17:32	33122	1619	-42138	8	P	-t	1.0830	0.8318	69N	140E	0		
-1407-Aug-04	12:44:00	33112	1618	-42132	13	P	-t	-1.1529	0.7199	68S	110E	0		
-1407-Sep-02	23:12:40	33110	1617	-42131	51	Pb	t-	1.5267	0.0353	71N	100E	0		
-1406-Jan-29	14:27:00	33102	1616	-42126	18	A	-p	0.3889	0.9352	2N	103E	67	262	09m06s
-1406-Jul-25	04:49:42	33092	1615	-42120	23	T	-n	-0.4134	1.0707	2S	115W	66	252	06m42s
-1405-Jan-18	13:56:37	33082	1613	-42114	28	A	n-	-0.3153	0.9274	41S	113E	71	288	08m17s
-1405-Jul-14	21:17:42	33072	1612	-42108	33	T	n-	0.3173	1.0519	42N	3W	71	182	04m17s
-1404-Jan-07	16:16:53	33062	1611	-42102	38	A-	t-	-0.9975	0.9732	66S	96W	0		
-1404-Jul-03	09:33:00	33052	1609	-42096	43	P	t-	1.1162	0.7780	65N	9E	0		
-1404-Nov-27	14:15:46	33044	1608	-42091	10	P	-t	1.1064	0.8055	63N	150E	0		
-1403-May-24	00:06:21	33034	1607	-42085	15	A	-t	-0.8919	0.9421	41S	20W	27	463	06m02s
-1403-Nov-17	05:51:42	33024	1605	-42079	20	T	-n	0.4408	1.0412	8N	122W	64	152	03m40s
-1402-May-13	01:12:02	33014	1604	-42073	25	Am	nn	-0.1170	0.9660	8N	60W	83	123	03m51s

-1402-Nov-06	19:50:01	33004	1602	-42067	30	H	n-	-0.2381	1.0039	25S	11E	76	14	00m21s
-1401-May-02	07:55:45	32994	1601	-42061	35	H	p-	0.6574	1.0118	46N	172E	49	53	00m55s
-1401-Oct-27	03:53:51	32984	1600	-42055	40	A	p-	-0.9747	0.9381	62S	177E	12	1059	04m13s
-1400-Mar-22	14:17:26	32976	1598	-42050	7	P	-t	-1.1613	0.7108	61S	156W	0		
-1400-Apr-20	21:33:44	32974	1598	-42049	45	P	t-	1.3654	0.3180	61N	109W	0		
-1400-Sep-15	10:16:34	32966	1597	-42044	12	P	-t	1.3410	0.3822	61N	92W	0		

14TH CENTURY BCE

In the 14th century BCE the total number of solar eclipses was 234 solar eclipses: 76 partial solar eclipses, 84 annular solar eclipses (81 central annular solar eclipses with two limits, 2 central annular solar eclipses with one limit, 1 non-central annular solar eclipses with one limit), 68 total solar eclipses (66 central total solar eclipses with two limits, 2 central total solar eclipses with one limit, 0 non-central total solar eclipses with one limit), 6 hybrid solar eclipses.

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°	°	ALT	WIDTH	DUR.
	GREATEST		S									°	km	
	ECLIPSE													
-1399-Mar-12	07:04:34	32956	1596	-42038	17	T	-p	-0.4533	1.0551	32S	130W	63	202	04m14s
-1399-Sep-04	12:17:18	32946	1594	-42032	22	A	-p	0.5997	0.9624	44N	155E	53	168	03m18s
-1398-Mar-01	20:16:17	32936	1593	-42026	27	H	n-	0.2915	1.0027	3N	10E	73	10	00m16s
-1398-Aug-24	21:36:48	32926	1591	-42020	32	T	n-	-0.1531	1.0243	8N	10W	81	83	02m18s
-1397-Feb-19	02:21:20	32916	1590	-42014	37	P	t-	1.0714	0.8408	62N	131W	0		
-1397-Aug-14	12:44:56	32906	1589	-42008	42	T	p-	-0.8536	1.0554	36S	105E	31	346	04m22s
-1396-Jan-09	08:50:44	32898	1587	-42003	9	P	-t	-1.1970	0.6234	65S	14W	0		

-1396-Jul-04	20:48:33	32888	1586	-41997	14	P	-t	1.0128	0.9825	66N	171E	0	
-1396-Dec-28	13:00:10	32878	1585	-41991	19	A	-n	-0.4551	0.9753	51S	126E	63	99 02m13s
-1395-Jun-24	07:15:47	32868	1583	-41985	24	A	-p	0.2748	0.9867	39N	154W	74	49 01m21s
-1395-Dec-18	00:18:08	32858	1582	-41979	29	T	n-	0.2563	1.0278	8S	47W	75	97 02m50s
-1394-Jun-13	10:38:20	32848	1580	-41973	34	A	p-	-0.5043	0.9497	8S	157E	60	214 06m58s
-1394-Dec-07	15:39:46	32839	1579	-41967	39	T	p-	0.9135	1.0359	45N	88E	24	299 02m51s
-1393-May-03	21:57:26	32830	1578	-41962	6	Pe	-t	1.5310	0.0405	71N	139W	0	
-1393-Jun-02	11:17:33	32829	1578	-41961	44	P	t-	-1.2554	0.5256	69S	167E	0	
-1393-Oct-28	17:30:59	32820	1576	-41956	11	P	-t	-1.1783	0.6634	71S	66W	0	
-1392-Apr-22	06:43:22	32810	1575	-41950	16	T	-p	0.7039	1.0261	50N	163W	45	124 02m03s
-1392-Oct-16	23:28:20	32800	1574	-41944	21	A	-p	-0.5227	0.9363	35S	48W	58	276 06m55s
-1391-Apr-11	21:42:38	32791	1572	-41938	26	T	nn	-0.0682	1.0729	0S	7W	86	237 06m31s
-1391-Oct-05	23:20:47	32781	1571	-41932	31	A	nn	0.1638	0.9208	9N	32W	81	304 10m27s
-1390-Apr-01	14:49:34	32771	1569	-41926	36	T	p-	-0.8003	1.0619	50S	119E	37	337 04m22s
-1390-Sep-24	23:55:25	32761	1568	-41920	41	A	p-	0.8487	0.9417	58N	14W	32	406 04m58s
-1389-Feb-20	17:56:21	32753	1567	-41915	8	P	-t	1.1265	0.7546	70N	11E	0	
-1389-Aug-15	20:35:26	32743	1565	-41909	13	P	-t	-1.1941	0.6425	69S	21W	0	
-1389-Sep-14	07:18:05	32741	1565	-41908	51	P	t-	1.4963	0.0903	71N	36W	0	
-1388-Feb-09	21:51:14	32733	1564	-41903	18	A	-p	0.4266	0.9365	6N	11W	65	261 08m44s
-1388-Aug-04	12:41:51	32723	1563	-41897	23	T	-p	-0.4646	1.0672	7S	123E	62	247 06m19s
-1387-Jan-28	21:27:34	32713	1561	-41891	28	A	n-	-0.2854	0.9315	38S	1E	73	268 07m59s
-1387-Jul-25	04:53:19	32703	1560	-41885	33	T	n-	0.2594	1.0467	38N	116W	75	161 04m02s
-1386-Jan-18	00:18:25	32693	1558	-41879	38	A	t-	-0.9774	0.9560	78S	129E	11	820 02m35s
-1386-Jul-14	16:36:30	32683	1557	-41873	43	P	t-	1.0517	0.8918	66N	108W	0	
-1386-Dec-08	23:06:06	32675	1556	-41868	10	P	-t	1.1051	0.8086	63N	6E	0	
-1385-Jun-04	06:22:55	32665	1555	-41862	15	As	-t	-0.9810	0.9374	54S	110W	10	- 05m51s
-1385-Nov-28	14:44:59	32655	1553	-41856	20	T	-n	0.4412	1.0404	6N	102E	64	150 03m43s
-1384-May-23	07:40:09	32645	1552	-41850	25	A	nn	-0.2039	0.9684	7N	157W	78	116 03m41s
-1384-Nov-17	04:30:03	32635	1550	-41844	30	H	n-	-0.2388	1.0006	29S	120W	76	2 00m03s
-1383-May-12	14:54:53	32626	1549	-41838	35	T	p-	0.5770	1.0173	45N	70E	55	72 01m22s
-1383-Nov-06	12:07:45	32616	1548	-41832	40	A	p-	-0.9727	0.9348	65S	45E	13	1082 04m20s
-1382-Apr-02	21:57:30	32607	1546	-41827	7	P	-t	-1.2206	0.5966	61S	78E	0	
-1382-May-02	04:56:36	32606	1546	-41826	45	P	t-	1.2922	0.4582	61N	130E	0	

-1382-Sep-26	17:52:40	32597	1545	-41821	12	P	-t	1.3648	0.3428	61N	144E	0		
-1381-Mar-23	14:45:53	32588	1544	-41815	17	T	-p	-0.5119	1.0551	31S	114E	59	209	04m14s
-1381-Sep-15	20:05:00	32578	1542	-41809	22	A	-p	0.6270	0.9620	41N	38E	51	174	03m21s
-1380-Mar-12	03:44:29	32568	1541	-41803	27	H	nn	0.2384	1.0025	4N	103W	76	9	00m14s
-1380-Sep-04	05:40:42	32558	1540	-41797	32	T	n-	-0.1198	1.0242	6N	132W	83	83	02m14s
-1379-Mar-01	09:31:22	32548	1538	-41791	37	P	t-	1.0226	0.9248	61N	111E	0		
-1379-Aug-24	20:51:54	32538	1537	-41785	42	T	p-	-0.8143	1.0540	34S	20W	35	302	04m14s
-1378-Jan-19	16:33:40	32530	1536	-41780	9	P	-t	-1.2168	0.5905	64S	141W	0		
-1378-Jul-16	04:12:03	32520	1534	-41774	14	P	-t	1.0795	0.8557	65N	49E	0		
-1378-Aug-14	13:11:54	32518	1534	-41773	52	Pb	t-	-1.5202	0.0275	63S	69E	0		
-1377-Jan-08	21:14:29	32510	1533	-41768	19	A	-p	-0.4656	0.9806	51S	6E	62	78	01m42s
-1377-Jul-05	14:06:22	32500	1531	-41762	24	A	-p	0.3508	0.9810	45N	105E	69	72	01m51s
-1377-Dec-29	08:58:01	32490	1530	-41756	29	T	n-	0.2496	1.0320	9S	179W	76	112	03m13s
-1376-Jun-23	17:01:42	32481	1529	-41750	34	A	p-	-0.4202	0.9478	2S	58E	65	211	07m22s
-1376-Dec-18	00:30:27	32471	1527	-41744	39	T	p-	0.9117	1.0369	43N	51W	24	305	02m59s
-1375-Jun-12	17:43:12	32461	1526	-41738	44	P	t-	-1.1692	0.6747	68S	58E	0		
-1375-Nov-08	02:03:18	32453	1525	-41733	11	P	-t	-1.1824	0.6556	71S	151E	0		
-1374-May-03	13:51:34	32443	1523	-41727	16	T	-p	0.7754	1.0295	59N	82E	39	158	02m07s
-1374-Oct-28	07:33:44	32433	1522	-41721	21	A	-p	-0.5296	0.9326	40S	172W	58	295	07m08s
-1373-Apr-23	05:10:44	32423	1521	-41715	26	T	nn	0.0017	1.0762	8N	123W	90	247	06m47s
-1373-Oct-17	07:09:52	32413	1519	-41709	31	A	nn	0.1509	0.9190	4N	152W	81	310	10m51s
-1372-Apr-11	22:22:27	32403	1518	-41703	36	T	p-	-0.7370	1.0637	41S	2W	42	306	04m52s
-1372-Oct-05	07:52:22	32393	1517	-41697	41	A	p-	0.8302	0.9423	52N	139W	34	380	05m12s
-1371-Mar-03	01:25:26	32385	1515	-41692	8	P	-t	1.1768	0.6653	71N	116W	0		
-1371-Apr-01	12:44:14	32384	1515	-41691	46	Pb	t-	-1.5281	0.0256	71S	143W	0		
-1371-Aug-26	04:36:30	32375	1514	-41686	13	P	-t	-1.2280	0.5788	70S	155W	0		
-1371-Sep-24	15:32:26	32374	1514	-41685	51	P	t-	1.4724	0.1335	72N	175W	0		
-1370-Feb-20	05:05:42	32365	1513	-41680	18	A	-p	0.4716	0.9378	12N	123W	62	261	08m17s
-1370-Aug-15	20:40:45	32356	1511	-41674	23	T	-p	-0.5099	1.0633	12S	0E	59	241	05m51s
-1369-Feb-09	04:49:50	32346	1510	-41668	28	A	nn	-0.2482	0.9359	33S	110W	75	246	07m38s
-1369-Aug-05	12:35:11	32336	1508	-41662	33	T	n-	0.2077	1.0410	33N	128E	78	140	03m41s
-1368-Jan-29	08:10:46	32326	1507	-41656	38	A	t-	-0.9493	0.9636	84S	43W	18	433	02m15s
-1368-Jul-24	23:46:26	32316	1506	-41650	43	An	t-	0.9935	0.9744	72N	130E	5	-	01m24s

-1368-Dec-19	07:52:39	32308	1505	-41645	10	P	-t	1.1070	0.8059	64N	136W	0		
-1367-Jun-14	12:41:58	32298	1503	-41639	15	P	-t	-1.0675	0.8467	64S	156E	0		
-1367-Dec-08	23:36:06	32288	1502	-41633	20	T	-n	0.4430	1.0401	4N	33W	64	149	03m48s
-1366-Jun-03	14:10:14	32279	1500	-41627	25	A	nn	-0.2896	0.9703	4N	105E	73	111	03m35s
-1366-Nov-28	13:10:13	32269	1499	-41621	30	A	n-	-0.2403	0.9979	32S	109E	76	7	00m11s
-1365-May-23	21:52:36	32259	1498	-41615	35	T	p-	0.4946	1.0220	45N	31W	60	86	01m47s
-1365-Nov-17	20:24:22	32249	1496	-41609	40	A	p-	-0.9737	0.9319	67S	90W	12	1166	04m25s
-1364-Apr-13	05:30:58	32241	1495	-41604	7	P	-t	-1.2852	0.4714	61S	45W	0		
-1364-May-12	12:16:54	32239	1495	-41603	45	P	t-	1.2164	0.6042	62N	10E	0		
-1364-Oct-07	01:37:41	32231	1494	-41598	12	P	-t	1.3813	0.3155	61N	17E	0		
-1363-Apr-02	22:20:26	32221	1493	-41592	17	T	-p	-0.5755	1.0543	30S	0E	55	216	04m13s
-1363-Sep-26	04:02:49	32211	1491	-41586	22	A	-p	0.6465	0.9619	38N	84W	50	177	03m25s
-1362-Mar-23	11:04:32	32201	1490	-41580	27	H	nn	0.1795	1.0020	5N	146E	80	7	00m11s
-1362-Sep-15	13:52:45	32192	1488	-41574	32	T	n-	-0.0926	1.0240	3N	103E	85	82	02m10s
-1361-Mar-12	16:32:38	32182	1487	-41568	37	A	t-	0.9672	0.9403	54N	19E	14	869	04m57s
-1361-Sep-05	05:06:27	32172	1486	-41562	42	T	p-	-0.7812	1.0521	34S	147W	38	271	04m01s
-1360-Jan-31	00:08:50	32164	1485	-41557	9	P	-t	-1.2434	0.5460	63S	94E	0		
-1360-Jul-26	11:41:42	32154	1483	-41551	14	P	-t	1.1402	0.7413	64N	75W	0		
-1360-Aug-24	21:12:20	32152	1483	-41550	52	P	t-	-1.4853	0.0959	62S	62W	0		
-1359-Jan-19	05:22:43	32144	1482	-41545	19	A	-p	-0.4824	0.9862	51S	113W	61	56	01m10s
-1359-Jul-15	21:02:02	32134	1480	-41539	24	A	-p	0.4215	0.9751	48N	4E	65	98	02m20s
-1358-Jan-08	17:32:20	32125	1479	-41533	29	T	n-	0.2378	1.0365	10S	51E	76	126	03m36s
-1358-Jul-04	23:30:17	32115	1478	-41527	34	A	pn	-0.3403	0.9456	4N	42W	70	213	07m38s
-1358-Dec-29	09:15:28	32105	1476	-41521	39	T	p-	0.9055	1.0386	41N	171E	25	307	03m09s
-1357-Jun-24	00:13:27	32095	1475	-41515	44	P	t-	-1.0856	0.8195	67S	53W	0		
-1357-Nov-19	10:36:24	32087	1474	-41510	11	P	-t	-1.1850	0.6504	70S	8E	0		
-1356-May-13	20:58:48	32077	1473	-41504	16	T	-p	0.8485	1.0317	69N	37W	32	203	02m04s
-1356-Nov-07	15:41:08	32067	1471	-41498	21	A	-p	-0.5342	0.9298	44S	65E	57	311	07m16s
-1355-May-03	12:36:08	32058	1470	-41492	26	Tm	nn	0.0742	1.0785	16N	122E	86	254	06m53s
-1355-Oct-27	15:05:16	32048	1468	-41486	31	A	nn	0.1430	0.9180	1S	87E	82	314	11m10s
-1354-Apr-23	05:48:56	32038	1467	-41480	36	T	p-	-0.6688	1.0648	32S	121W	48	283	05m19s
-1354-Oct-16	15:58:10	32028	1466	-41474	41	A	p-	0.8181	0.9430	47N	94E	35	362	05m24s
-1353-Mar-14	08:43:17	32020	1465	-41469	8	P	-t	1.2352	0.5617	71N	120E	0		

-1353-Apr-12	19:55:55	32018	1464	-41468	46	P	t-	-1.4668	0.1388	71S	94E	0	
-1353-Sep-06	12:46:53	32010	1463	-41463	13	P	-t	-1.2548	0.5286	71S	68E	0	
-1353-Oct-05	23:55:54	32009	1463	-41462	51	P	t-	1.4554	0.1641	72N	43E	0	
-1352-Mar-02	12:08:29	32000	1462	-41457	18	A	-p	0.5255	0.9391	19N	127E	58	264 07m44s
-1352-Aug-26	04:48:25	31991	1461	-41451	23	T	-p	-0.5477	1.0592	17S	126W	57	232 05m20s
-1351-Feb-19	12:04:18	31981	1459	-41445	28	A	nn	-0.2043	0.9406	27S	140E	78	225 07m12s
-1351-Aug-15	20:22:55	31971	1458	-41439	33	T	nn	0.1618	1.0350	27N	10E	81	119 03m16s
-1350-Feb-08	15:57:51	31961	1456	-41433	38	A	t-	-0.9159	0.9712	80S	139E	23	262 01m53s
-1350-Aug-05	07:01:02	31951	1455	-41427	43	A	p-	0.9401	0.9722	84N	51W	19	300 01m44s
-1350-Dec-30	16:35:49	31943	1454	-41422	10	P	-t	1.1123	0.7968	65N	81E	0	
-1349-Jun-25	19:03:35	31933	1453	-41416	15	P	-t	-1.1516	0.7027	65S	50E	0	
-1349-Dec-20	08:24:17	31924	1451	-41410	20	T	-n	0.4471	1.0402	3N	168W	63	150 03m54s
-1348-Jun-13	20:45:02	31914	1450	-41404	25	A	-p	-0.3724	0.9716	1N	5E	68	109 03m31s
-1348-Dec-08	21:46:35	31904	1449	-41398	30	A	n-	-0.2394	0.9958	35S	19W	76	15 00m24s
-1347-Jun-03	04:54:58	31894	1447	-41392	35	T	p-	0.4148	1.0260	43N	134W	65	97 02m09s
-1347-Nov-28	04:39:18	31885	1446	-41386	40	A	p-	-0.9742	0.9298	70S	134E	12	1227 04m28s
-1346-Apr-24	13:00:49	31876	1445	-41381	7	P	-t	-1.3530	0.3395	61S	168W	0	
-1346-May-23	19:37:29	31875	1445	-41380	45	P	t-	1.1403	0.7515	62N	111W	0	
-1346-Oct-18	09:29:36	31867	1443	-41375	12	P	-t	1.3926	0.2969	61N	111W	0	
-1345-Apr-14	05:47:39	31857	1442	-41369	17	T	-p	-0.6446	1.0528	31S	112W	50	224 04m08s
-1345-Oct-07	12:09:34	31847	1441	-41363	22	A	-p	0.6597	0.9623	35N	152E	49	177 03m27s
-1344-Apr-02	18:13:59	31837	1439	-41357	27	Hm	nn	0.1125	1.0010	6N	38E	84	3 00m06s
-1344-Sep-25	22:15:03	31828	1438	-41351	32	T	n-	-0.0733	1.0240	0N	24W	86	82 02m08s
-1343-Mar-22	23:23:30	31818	1437	-41345	37	A	p-	0.9034	0.9437	49N	78W	25	471 04m53s
-1343-Sep-15	13:29:21	31808	1435	-41339	42	T	p-	-0.7549	1.0500	35S	84E	41	247 03m46s
-1342-Feb-10	07:35:49	31800	1434	-41334	9	P	-t	-1.2770	0.4888	62S	28W	0	
-1342-Aug-06	19:17:04	31790	1433	-41328	14	P	-t	1.1955	0.6380	63N	160E	0	
-1342-Sep-05	05:20:25	31788	1433	-41327	52	P	t-	-1.4568	0.1513	61S	165E	0	
-1341-Jan-30	13:23:36	31780	1432	-41322	19	A	-p	-0.5059	0.9923	49S	130E	59	31 00m39s
-1341-Jul-27	04:02:02	31771	1430	-41316	24	A	-p	0.4876	0.9688	50N	97W	61	129 02m50s
-1340-Jan-20	02:00:38	31761	1429	-41310	29	T	n-	0.2205	1.0414	10S	77W	77	142 03m58s
-1340-Jul-15	06:04:13	31751	1428	-41304	34	A	nn	-0.2649	0.9430	8N	142W	75	218 07m50s
-1339-Jan-08	17:55:13	31741	1426	-41298	39	T	p-	0.8954	1.0406	40N	36E	26	306 03m20s

-1339-Jul-04	06:50:20	31732	1425	-41292	44	A-	t-	-1.0063	0.9571	66S	164W	0		
-1339-Nov-29	19:09:27	31723	1424	-41287	11	P	-t	-1.1872	0.6462	69S	134W	0		
-1338-May-25	04:06:22	31714	1422	-41281	16	T	-t	0.9221	1.0327	79N	176W	22	290	01m54s
-1338-Nov-18	23:50:25	31704	1421	-41275	21	A	-p	-0.5366	0.9275	48S	57W	57	323	07m22s
-1337-May-14	19:59:52	31694	1420	-41269	26	T	nn	0.1486	1.0801	23N	8E	81	261	06m51s
-1337-Nov-07	23:04:15	31684	1418	-41263	31	A	nn	0.1380	0.9176	5S	35W	82	316	11m24s
-1336-May-03	13:11:54	31675	1417	-41257	36	T	p-	-0.5981	1.0649	24S	123E	53	263	05m41s
-1336-Oct-27	00:09:55	31665	1416	-41251	41	A	p-	0.8101	0.9442	43N	35W	36	347	05m33s
-1335-Mar-24	15:52:54	31657	1415	-41246	8	P	-t	1.2990	0.4488	72N	3W	0		
-1335-Apr-23	03:02:48	31655	1414	-41245	46	P	t-	-1.4025	0.2574	71S	28W	0		
-1335-Sep-16	21:05:15	31647	1413	-41240	13	P	-t	-1.2757	0.4895	71S	72W	0		
-1335-Oct-16	08:25:16	31645	1413	-41239	51	P	t-	1.4427	0.1870	72N	100W	0		
-1334-Mar-13	19:02:41	31637	1412	-41234	18	A	-p	0.5859	0.9402	27N	19E	54	271	07m09s
-1334-Sep-06	13:03:50	31628	1411	-41228	23	T	-p	-0.5788	1.0551	23S	107E	54	222	04m48s
-1333-Mar-02	19:08:32	31618	1409	-41222	28	A	nn	-0.1514	0.9454	20S	31E	81	203	06m43s
-1333-Aug-27	04:18:43	31608	1408	-41216	33	T	nn	0.1233	1.0289	22N	111W	83	99	02m46s
-1332-Feb-19	23:35:36	31598	1407	-41210	38	A	t-	-0.8739	0.9789	72S	2E	29	155	01m28s
-1332-Aug-15	14:23:54	31589	1405	-41204	43	A	p-	0.8940	0.9677	78N	144E	26	263	02m12s
-1331-Jan-10	01:12:02	31581	1404	-41199	10	P	-t	1.1236	0.7765	66N	60W	0		
-1331-Feb-08	11:08:36	31579	1404	-41198	48	Pb	t-	-1.5291	0.0161	69S	59W	0		
-1331-Jul-06	01:31:47	31571	1403	-41193	15	P	-t	-1.2298	0.5691	66S	59W	0		
-1331-Dec-30	17:07:47	31561	1401	-41187	20	T	-p	0.4549	1.0406	3N	59E	63	153	04m00s
-1330-Jun-25	03:23:45	31551	1400	-41181	25	A	-p	-0.4525	0.9724	3S	97W	63	110	03m29s
-1330-Dec-20	06:20:20	31542	1399	-41175	30	A	n-	-0.2372	0.9942	37S	147W	76	21	00m33s
-1329-Jun-14	11:59:36	31532	1397	-41169	35	T	p-	0.3363	1.0292	41N	123E	70	105	02m30s
-1329-Dec-09	12:52:20	31522	1396	-41163	40	A	p-	-0.9738	0.9283	72S	2W	12	1251	04m30s
-1328-May-04	20:26:46	31514	1395	-41158	7	P	-t	-1.4240	0.2012	61S	70E	0		
-1328-Jun-03	02:58:52	31512	1395	-41157	45	P	t-	1.0644	0.8986	63N	128E	0		
-1328-Oct-28	17:28:31	31504	1394	-41152	12	P	-t	1.3984	0.2873	61N	119E	0		
-1327-Apr-24	13:10:07	31495	1392	-41146	17	T	-p	-0.7171	1.0504	32S	137E	44	234	04m00s
-1327-Oct-17	20:23:43	31485	1391	-41140	22	A	-p	0.6677	0.9631	31N	26E	48	175	03m29s
-1326-Apr-14	01:17:05	31475	1390	-41134	27	A	nn	0.0412	0.9996	6N	69W	88	1	00m02s
-1326-Oct-07	06:44:43	31465	1388	-41128	32	T	n-	-0.0595	1.0241	4S	153W	87	82	02m07s

-1325-Apr-03	06:05:06	31456	1387	-41122	37	A	p-	0.8325	0.9462	47N	175W	33	347	04m45s
-1325-Sep-26	21:59:52	31446	1386	-41116	42	T	p-	-0.7350	1.0477	37S	46W	42	229	03m30s
-1324-Feb-21	14:54:54	31438	1385	-41111	9	P	-t	-1.3174	0.4196	62S	148W	0		
-1324-Aug-17	02:59:32	31428	1383	-41105	14	P	-t	1.2439	0.5486	62N	34E	0		
-1324-Sep-15	13:35:39	31427	1383	-41104	52	P	t-	-1.4348	0.1941	61S	31E	0		
-1323-Feb-09	21:17:11	31419	1382	-41099	19	A	-p	-0.5364	0.9983	48S	13E	57	7	00m08s
-1323-Aug-06	11:09:21	31409	1381	-41093	24	A	-p	0.5466	0.9625	51N	160E	57	162	03m20s
-1322-Jan-30	10:21:48	31399	1379	-41087	29	T	n-	0.1967	1.0465	10S	156E	79	158	04m19s
-1322-Jul-26	12:44:42	31389	1378	-41081	34	A	nn	-0.1949	0.9402	12N	117E	79	226	07m57s
-1321-Jan-20	02:27:35	31380	1377	-41075	39	T	p-	0.8793	1.0431	38N	98W	28	302	03m32s
-1321-Jul-15	13:35:05	31370	1375	-41069	44	A	t-	-0.9320	0.9509	45S	94E	21	499	05m04s
-1321-Dec-11	03:38:17	31362	1374	-41064	11	P	-t	-1.1922	0.6373	68S	86E	0		
-1320-Jun-04	11:16:31	31352	1373	-41058	16	Tn	-t	0.9943	1.0300	72N	18W	4	-	01m30s
-1320-Nov-29	07:58:33	31342	1372	-41052	21	A	-p	-0.5397	0.9260	52S	178W	57	331	07m23s
-1319-May-25	03:23:10	31333	1370	-41046	26	T	-n	0.2235	1.0808	31N	105W	77	267	06m41s
-1319-Nov-18	07:05:47	31323	1369	-41040	31	A	nn	0.1347	0.9178	9S	157W	82	315	11m30s
-1318-May-14	20:31:03	31313	1368	-41034	36	T	p-	-0.5245	1.0641	16S	8E	58	245	05m55s
-1318-Nov-07	08:27:44	31304	1366	-41028	41	A	p-	0.8064	0.9459	39N	164W	36	334	05m36s
-1317-Apr-04	22:51:05	31296	1365	-41023	8	P	-t	1.3707	0.3219	72N	123W	0		
-1317-May-04	10:01:25	31294	1365	-41022	46	P	t-	-1.3323	0.3864	71S	147W	0		
-1317-Sep-28	05:33:01	31286	1364	-41017	13	P	-t	-1.2896	0.4634	72S	145E	0		
-1317-Oct-27	17:02:09	31284	1364	-41016	51	P	t-	1.4355	0.1997	71N	115E	0		
-1316-Mar-24	01:46:53	31276	1363	-41011	18	A	-p	0.6538	0.9410	35N	88W	49	285	06m32s
-1316-Sep-16	21:27:14	31267	1361	-41005	23	T	-p	-0.6032	1.0510	28S	23W	53	211	04m18s
-1315-Mar-13	02:06:12	31257	1360	-40999	28	A	nn	-0.0925	0.9502	13S	76W	85	183	06m10s
-1315-Sep-06	12:21:40	31247	1359	-40993	33	T	nn	0.0915	1.0228	16N	127E	85	78	02m14s
-1314-Mar-02	07:07:52	31238	1357	-40987	38	A	p-	-0.8264	0.9867	64S	123W	34	84	00m59s
-1314-Aug-26	21:52:25	31228	1356	-40981	43	A	p-	0.8534	0.9627	70N	17E	31	260	02m46s
-1313-Jan-21	09:43:24	31220	1355	-40976	10	P	-t	1.1392	0.7479	67N	160E	0		
-1313-Feb-19	19:11:39	31218	1355	-40975	48	P	t-	-1.4917	0.0836	70S	166E	0		
-1313-Jul-17	08:06:06	31210	1354	-40970	15	P	-t	-1.3025	0.4453	67S	170W	0		
-1312-Jan-11	01:44:33	31200	1352	-40964	20	T	-p	0.4677	1.0413	4N	73W	62	156	04m06s
-1312-Jul-05	10:10:51	31191	1351	-40958	25	A	-p	-0.5263	0.9728	8S	159E	58	114	03m27s

-1312-Dec-30	14:47:46	31181	1350	-40952	30	Am	n-	-0.2309	0.9931	37S	88E	76	25	00m40s
-1311-Jun-24	19:10:30	31172	1348	-40946	35	T	n-	0.2619	1.0317	39N	17E	75	111	02m48s
-1311-Dec-19	21:00:03	31162	1347	-40940	40	A	p-	-0.9698	0.9277	76S	136W	13	1174	04m33s
-1310-May-16	03:51:44	31154	1346	-40935	7	Pe	-t	-1.4955	0.0617	62S	52W	0		
-1310-Jun-14	10:23:23	31152	1346	-40934	45	Tn	t-	0.9909	1.0593	69N	15E	6	-	02m48s
-1310-Nov-09	01:31:22	31144	1345	-40929	12	P	-t	1.4015	0.2820	61N	12W	0		
-1309-May-05	20:26:29	31134	1343	-40923	17	T	-p	-0.7940	1.0468	35S	27E	37	251	03m45s
-1309-Oct-29	04:44:42	31125	1342	-40917	22	A	-p	0.6708	0.9645	28N	103W	48	169	03m28s
-1308-Apr-24	08:12:06	31115	1341	-40911	27	A	nn	-0.0358	0.9976	7N	173W	88	8	00m14s
-1308-Oct-17	15:21:16	31105	1340	-40905	32	T	n-	-0.0509	1.0246	8S	76E	87	84	02m09s
-1307-Apr-13	12:39:06	31096	1338	-40899	37	A	p-	0.7557	0.9480	45N	89E	41	284	04m40s
-1307-Oct-07	06:38:10	31086	1337	-40893	42	T	p-	-0.7219	1.0456	40S	179W	44	215	03m16s
-1306-Mar-03	22:05:35	31078	1336	-40888	9	P	-t	-1.3649	0.3371	61S	94E	0		
-1306-Apr-02	13:04:20	31076	1336	-40887	47	Pb	t-	1.4988	0.1095	61N	25E	0		
-1306-Aug-28	10:48:33	31068	1335	-40882	14	P	-t	1.2862	0.4715	62N	94W	0		
-1306-Sep-26	21:58:14	31067	1334	-40881	52	P	t-	-1.4193	0.2245	61S	105W	0		
-1305-Feb-21	05:03:29	31059	1333	-40876	19	H	-p	-0.5737	1.0045	46S	102W	55	19	00m22s
-1305-Aug-17	18:23:36	31049	1332	-40870	24	A	-p	0.5992	0.9561	51N	55E	53	198	03m51s
-1304-Feb-10	18:35:12	31039	1331	-40864	29	T	n-	0.1659	1.0518	9S	32E	81	174	04m38s
-1304-Aug-05	19:34:00	31030	1329	-40858	34	A	nn	-0.1320	0.9373	13N	14E	82	235	08m03s
-1303-Jan-30	10:53:31	31020	1328	-40852	39	T	p-	0.8579	1.0459	36N	131E	31	294	03m44s
-1303-Jul-25	20:27:39	31011	1327	-40846	44	A	t-	-0.8629	0.9530	36S	13W	30	337	05m09s
-1303-Dec-21	12:03:57	31002	1326	-40841	11	P	-t	-1.1991	0.6251	67S	53W	0		
-1302-Jun-15	18:30:08	30993	1324	-40835	16	P	-t	1.0644	0.8885	67N	143W	0		
-1302-Dec-10	16:04:39	30983	1323	-40829	21	A	-p	-0.5438	0.9251	55S	63E	57	337	07m21s
-1301-Jun-05	10:46:59	30974	1322	-40823	26	T	-n	0.2981	1.0805	38N	142E	72	272	06m25s
-1301-Nov-29	15:07:48	30964	1320	-40817	31	A	nn	0.1316	0.9188	12S	81E	83	311	11m26s
-1300-May-25	03:49:43	30954	1319	-40811	36	T	p-	-0.4510	1.0624	8S	106W	63	229	06m00s
-1300-Nov-17	16:47:01	30945	1318	-40805	41	A	p-	0.8030	0.9482	36N	66E	36	318	05m33s

13TH CENTURY BCE

In the 13th century BCE the total number of solar eclipses was 250 solar eclipses: 93 partial solar eclipses, 86 annular solar eclipses (86 central annular solar eclipses with two limits, 0 central annular solar eclipses with one limit, 0 non-central annular solar eclipses with one limit), 64 total solar eclipses (64 central total solar eclipses with two limits, 0 central total solar eclipses with one limit, 0 non-central total solar eclipses with one limit), 7 hybrid solar eclipses.

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°	°	ALT	WIDTH	DUR.
	GREATEST		S									°	km	
	ECLIPSE													
-1299-Apr-15	05:43:31	30937	1317	-40800	8	P	-t	1.4458	0.1894	72N	118E	0		
-1299-May-14	16:58:21	30935	1317	-40799	46	P	t-	-1.2612	0.5162	70S	94E	0		
-1299-Oct-08	14:07:56	30927	1315	-40794	13	P	-t	-1.2985	0.4468	72S	1E	0		
-1299-Nov-07	01:42:42	30925	1315	-40793	51	P	t-	1.4305	0.2082	71N	30W	0		
-1298-Apr-04	08:23:07	30917	1314	-40788	18	A	-p	0.7278	0.9415	45N	166E	43	312	05m56s
-1298-Sep-28	05:57:56	30908	1313	-40782	23	T	-p	-0.6216	1.0471	34S	155W	51	199	03m50s
-1297-Mar-24	08:55:41	30898	1312	-40776	28	A	nn	-0.0260	0.9550	5S	178E	88	164	05m35s
-1297-Sep-17	20:32:55	30888	1310	-40770	33	H3	nn	0.0675	1.0168	11N	1E	86	58	01m40s
-1296-Mar-12	14:31:20	30879	1309	-40764	38	A	p-	-0.7706	0.9943	55S	118E	39	31	00m27s
-1296-Sep-06	05:30:38	30869	1308	-40758	43	A	p-	0.8214	0.9575	63N	105W	34	271	03m23s
-1295-Jan-31	18:06:40	30861	1307	-40753	10	P	-t	1.1617	0.7061	68N	21E	0		
-1295-Mar-02	03:06:38	30860	1306	-40752	48	P	t-	-1.4472	0.1653	71S	33E	0		
-1295-Jul-27	14:48:24	30852	1305	-40747	15	P	-t	-1.3685	0.3334	68S	77E	0		
-1294-Jan-21	10:14:38	30842	1304	-40741	20	T	-p	0.4860	1.0422	7N	157E	61	161	04m11s
-1294-Jul-16	17:05:01	30832	1303	-40735	25	A	-p	-0.5949	0.9727	13S	52E	53	122	03m24s
-1293-Jan-10	23:08:14	30823	1301	-40729	30	A	n-	-0.2192	0.9924	36S	36W	77	27	00m45s
-1293-Jul-06	02:26:17	30813	1300	-40723	35	T	n-	0.1906	1.0335	35N	91W	79	115	03m04s

-1293-Dec-31	05:02:46	30803	1299	-40717	40	A	p-	-0.9622	0.9279	79S	90E	15	1040	04m35s
-1292-Jun-24	17:51:16	30794	1298	-40711	45	T	t-	0.9194	1.0642	81N	54W	23	545	03m22s
-1292-Nov-19	09:36:51	30786	1297	-40706	12	P	-t	1.4029	0.2793	62N	144W	0		
-1291-May-16	03:40:39	30776	1295	-40700	17	T	-t	-0.8720	1.0422	40S	82W	29	283	03m21s
-1291-Nov-08	13:10:45	30767	1294	-40694	22	A	-p	0.6707	0.9665	25N	127E	48	159	03m23s
-1290-May-05	15:01:36	30757	1293	-40688	27	A	nn	-0.1165	0.9951	6N	84E	83	17	00m30s
-1290-Oct-29	00:03:30	30747	1291	-40682	32	T	n-	-0.0463	1.0254	12S	56W	87	86	02m14s
-1289-Apr-24	19:06:57	30738	1290	-40676	37	A	p-	0.6742	0.9494	44N	5W	47	246	04m38s
-1289-Oct-18	15:21:50	30728	1289	-40670	42	T	p-	-0.7130	1.0436	44S	47E	44	204	03m03s
-1288-Mar-14	05:09:07	30720	1288	-40665	9	P	-t	-1.4189	0.2425	61S	23W	0		
-1288-Apr-12	19:37:16	30719	1287	-40664	47	P	t-	1.4208	0.2420	61N	83W	0		
-1288-Sep-07	18:45:40	30711	1286	-40659	14	P	-t	1.3213	0.4083	61N	137E	0		
-1288-Oct-07	06:27:13	30709	1286	-40658	52	P	t-	-1.4095	0.2439	61S	118E	0		
-1287-Mar-03	12:43:27	30701	1285	-40653	19	H	-p	-0.6176	1.0105	44S	144E	52	45	00m49s
-1287-Aug-28	01:44:54	30691	1284	-40647	24	A	-p	0.6452	0.9499	49N	53W	50	238	04m23s
-1286-Feb-21	02:41:21	30682	1283	-40641	29	T	n-	0.1283	1.0569	8S	91W	83	189	04m56s
-1286-Aug-17	02:32:04	30672	1281	-40635	34	A	nn	-0.0761	0.9343	14N	91W	86	246	08m08s
-1285-Feb-10	19:09:19	30663	1280	-40629	39	T	p-	0.8285	1.0488	34N	4E	34	285	03m56s
-1285-Aug-06	03:30:50	30653	1279	-40623	44	A	p-	-0.8014	0.9540	30S	121W	37	276	05m06s
-1284-Jan-01	20:22:17	30645	1278	-40618	11	P	-t	-1.2114	0.6033	66S	170E	0		
-1284-Jun-26	01:49:12	30636	1276	-40612	16	P	-t	1.1308	0.7637	66N	95E	0		
-1284-Jul-25	11:02:12	30634	1276	-40611	54	Pb	t-	-1.4895	0.0989	64S	109E	0		
-1284-Dec-21	00:05:09	30626	1275	-40606	21	A	-p	-0.5521	0.9249	57S	52W	56	340	07m16s
-1283-Jun-15	18:13:34	30616	1274	-40600	26	T	-n	0.3706	1.0793	44N	31E	68	276	06m03s
-1283-Dec-09	23:09:27	30607	1273	-40594	31	A	nn	0.1276	0.9205	15S	40W	83	303	11m11s
-1282-Jun-05	11:06:00	30597	1271	-40588	36	T	n-	-0.3760	1.0598	1S	141E	68	212	05m54s
-1282-Nov-29	01:09:43	30588	1270	-40582	41	A	p-	0.8015	0.9512	33N	64W	36	299	05m22s
-1281-Apr-26	12:27:25	30580	1269	-40577	8	Pe	-t	1.5266	0.0472	71N	2E	0		
-1281-May-25	23:50:31	30578	1269	-40576	46	P	t-	-1.1867	0.6516	69S	23W	0		
-1281-Oct-19	22:49:57	30570	1268	-40571	13	P	-t	-1.3023	0.4397	71S	145W	0		
-1281-Nov-18	10:26:44	30568	1267	-40570	51	P	t-	1.4279	0.2124	70N	175W	0		
-1280-Apr-14	14:52:11	30560	1266	-40565	18	A	-p	0.8072	0.9413	55N	59E	36	365	05m22s
-1280-Oct-08	14:36:10	30551	1265	-40559	23	T	-p	-0.6337	1.0436	39S	72E	50	187	03m26s

-1279-Apr-03	15:40:51	30541	1264	-40553	28	A	nn	0.0446	0.9596	3N	73E	87	147	04m58s
-1279-Sep-28	04:49:56	30532	1263	-40547	33	H	nn	0.0490	1.0110	5N	125W	87	38	01m07s
-1278-Mar-23	21:50:46	30522	1261	-40541	38	H	p-	-0.7102	1.0018	46S	1E	44	9	00m09s
-1278-Sep-17	13:15:12	30513	1260	-40535	43	A	p-	0.7955	0.9523	56N	133E	37	286	04m04s
-1277-Feb-12	02:22:32	30505	1259	-40530	10	P	-t	1.1906	0.6516	69N	116W	0		
-1277-Mar-13	10:54:36	30503	1259	-40529	48	P	t-	-1.3966	0.2596	71S	99W	0		
-1277-Aug-07	21:39:37	30495	1258	-40524	15	P	-t	-1.4272	0.2344	69S	38W	0		
-1277-Sep-06	14:48:24	30494	1257	-40523	53	Pb	t-	1.5326	0.0602	71N	150W	0		
-1276-Feb-01	18:36:19	30486	1256	-40518	20	T	-p	0.5109	1.0430	10N	29E	59	167	04m13s
-1276-Jul-27	00:09:08	30476	1255	-40512	25	A	-p	-0.6562	0.9724	19S	57W	49	131	03m20s
-1275-Jan-21	07:19:38	30466	1254	-40506	30	A	nn	-0.2009	0.9920	34S	158W	78	29	00m48s
-1275-Jul-16	09:50:50	30457	1253	-40500	35	T	nn	0.1257	1.0347	31N	159E	83	118	03m16s
-1274-Jan-10	12:57:27	30447	1251	-40494	40	A	p-	-0.9487	0.9288	84S	50W	18	875	04m39s
-1274-Jul-06	01:23:33	30438	1250	-40488	45	T	p-	0.8516	1.0658	81N	107W	31	415	03m41s
-1274-Nov-30	17:43:06	30430	1249	-40483	12	P	-t	1.4041	0.2769	63N	84E	0		
-1273-May-27	10:52:05	30420	1248	-40477	17	T	-t	-0.9511	1.0356	49S	172E	17	388	02m43s
-1273-Nov-19	21:39:09	30411	1246	-40471	22	A	-p	0.6694	0.9691	22N	4W	48	147	03m13s
-1272-May-15	21:46:44	30401	1245	-40465	27	A	nn	-0.1997	0.9919	5N	17W	79	29	00m52s
-1272-Nov-08	08:50:12	30392	1244	-40459	32	T	n-	-0.0454	1.0267	16S	170E	87	91	02m21s
-1271-May-05	01:29:53	30382	1243	-40453	37	A	p-	0.5886	0.9502	44N	98W	54	223	04m41s
-1271-Oct-29	00:10:33	30373	1241	-40447	42	T	p-	-0.7086	1.0418	48S	88W	45	196	02m51s
-1270-Mar-25	12:06:09	30365	1240	-40442	9	P	-t	-1.4784	0.1371	61S	137W	0		
-1270-Apr-24	02:05:28	30363	1240	-40441	47	P	t-	1.3382	0.3835	61N	170E	0		
-1270-Sep-19	02:50:05	30355	1239	-40436	14	P	-t	1.3497	0.3579	61N	5E	0		
-1270-Oct-18	15:02:19	30353	1239	-40435	52	P	t-	-1.4051	0.2531	61S	21W	0		
-1269-Mar-14	20:15:16	30346	1238	-40430	19	T	-p	-0.6690	1.0162	43S	32E	48	74	01m15s
-1269-Sep-08	09:14:56	30336	1237	-40424	24	A	-p	0.6832	0.9440	47N	165W	47	278	04m58s
-1268-Mar-03	10:39:58	30326	1235	-40418	29	T	nn	0.0839	1.0619	7S	149E	85	204	05m13s
-1268-Aug-27	09:39:38	30317	1234	-40412	34	A	nn	-0.0280	0.9313	13N	161E	88	257	08m15s
-1267-Feb-21	03:18:06	30307	1233	-40406	39	T	p-	0.7935	1.0515	33N	122W	37	275	04m05s
-1267-Aug-16	10:44:02	30298	1232	-40400	44	A	p-	-0.7472	0.9546	27S	128E	41	244	04m59s
-1266-Jan-12	04:34:41	30290	1230	-40395	11	P	-t	-1.2278	0.5746	65S	35E	0		
-1266-Jul-07	09:13:04	30280	1229	-40389	16	P	-t	1.1938	0.6447	65N	28W	0		

-1266-Aug-05	18:33:33	30279	1229	-40388	54	P	t-	-1.4314	0.2053	63S	15W	0		
-1265-Jan-01	08:01:01	30271	1228	-40383	21	A	-p	-0.5639	0.9252	58S	166W	55	342	07m07s
-1265-Jun-27	01:43:40	30261	1227	-40377	26	T	-p	0.4404	1.0773	50N	80W	64	279	05m39s
-1265-Dec-21	07:06:57	30252	1225	-40371	31	A	nn	0.1198	0.9229	17S	161W	83	293	10m44s
-1264-Jun-15	18:25:00	30242	1224	-40365	36	T	n-	-0.3037	1.0564	5N	28E	72	195	05m38s
-1264-Dec-09	09:30:51	30233	1223	-40359	41	A	p-	0.7975	0.9548	31N	166E	37	274	05m03s
-1263-Jun-05	06:42:47	30223	1222	-40353	46	P	t-	-1.1128	0.7845	68S	139W	0		
-1263-Oct-30	07:36:12	30215	1221	-40348	13	P	-t	-1.3034	0.4378	71S	68E	0		
-1263-Nov-28	19:11:02	30214	1220	-40347	51	P	t-	1.4250	0.2170	69N	40E	0		
-1262-Apr-25	21:16:08	30206	1219	-40342	18	A	-t	0.8904	0.9403	66N	53W	27	487	04m49s
-1262-Oct-19	23:19:51	30196	1218	-40336	23	T	-p	-0.6410	1.0404	44S	62W	50	175	03m05s
-1261-Apr-14	22:18:43	30187	1217	-40330	28	Am	nn	0.1219	0.9638	12N	31W	83	132	04m21s
-1261-Oct-09	13:14:20	30177	1216	-40324	33	H	nn	0.0374	1.0056	0N	106E	88	19	00m35s
-1260-Apr-03	05:03:33	30168	1214	-40318	38	H	p-	-0.6433	1.0088	37S	114W	50	40	00m48s
-1260-Sep-27	21:07:38	30158	1213	-40312	43	A	p-	0.7767	0.9474	50N	10E	39	304	04m47s
-1259-Feb-22	10:29:51	30150	1212	-40307	10	P	-t	1.2269	0.5827	70N	108E	0		
-1259-Mar-23	18:35:46	30149	1212	-40306	48	P	t-	-1.3399	0.3667	72S	130E	0		
-1259-Aug-18	04:40:53	30141	1211	-40301	15	P	-t	-1.4778	0.1495	70S	157W	0		
-1259-Sep-16	22:14:59	30139	1211	-40300	53	P	t-	1.5025	0.1120	71N	83E	0		
-1258-Feb-12	02:49:25	30131	1210	-40295	20	T	-p	0.5428	1.0438	15N	98W	57	174	04m11s
-1258-Aug-07	07:21:50	30122	1208	-40289	25	A	-p	-0.7113	0.9717	25S	170W	44	144	03m15s
-1257-Feb-01	15:22:40	30112	1207	-40283	30	A	nn	-0.1764	0.9919	30S	81E	80	29	00m50s
-1257-Jul-27	17:22:51	30103	1206	-40277	35	T	nn	0.0664	1.0352	26N	45E	86	119	03m24s
-1256-Jan-21	20:43:36	30093	1205	-40271	40	A	p-	-0.9289	0.9302	87S	107E	21	723	04m45s
-1256-Jul-16	09:02:05	30084	1203	-40265	45	T	p-	0.7887	1.0660	76N	167E	38	354	03m54s
-1256-Dec-11	01:49:20	30076	1202	-40260	12	P	-t	1.4052	0.2743	64N	48W	0		
-1255-Jun-06	18:03:04	30066	1201	-40254	17	P	-t	-1.0298	0.9522	63S	72E	0		
-1255-Jul-06	01:55:29	30065	1201	-40253	55	Pb	t-	1.5163	0.0292	66N	108E	0		
-1255-Nov-30	06:09:23	30057	1200	-40248	22	A	-p	0.6673	0.9723	20N	136W	48	131	02m59s
-1254-May-27	04:29:29	30047	1198	-40242	27	A	-p	-0.2837	0.9882	3N	119W	74	43	01m20s
-1254-Nov-19	17:39:00	30038	1197	-40236	32	T	n-	-0.0453	1.0285	20S	37E	87	97	02m32s
-1253-May-16	07:49:23	30028	1196	-40230	37	A	p-	0.5002	0.9505	43N	170E	60	208	04m49s
-1253-Nov-09	09:02:16	30019	1195	-40224	42	T	p-	-0.7066	1.0405	52S	137E	45	190	02m43s

-1252-Apr-04	18:58:37	30011	1194	-40219	9	Pe	-t	-1.5422	0.0231	61S	110E	0		
-1252-May-04	08:32:31	30009	1194	-40218	47	P	t-	1.2531	0.5301	61N	63E	0		
-1252-Sep-29	11:00:41	30001	1192	-40213	14	P	-t	1.3725	0.3180	61N	128W	0		
-1252-Oct-28	23:40:15	30000	1192	-40212	52	P	t-	-1.4036	0.2568	61S	161W	0		
-1251-Mar-25	03:42:29	29992	1191	-40207	19	T	-p	-0.7253	1.0215	42S	80W	43	104	01m39s
-1251-Sep-18	16:52:39	29982	1190	-40201	24	A	-p	0.7142	0.9384	45N	80E	44	319	05m34s
-1250-Mar-14	18:30:59	29973	1189	-40195	29	T	nn	0.0326	1.0665	6S	30E	88	217	05m29s
-1250-Sep-07	16:57:03	29964	1188	-40189	34	A	nn	0.0123	0.9286	11N	51E	89	268	08m24s
-1249-Mar-04	11:17:02	29954	1186	-40183	39	T	p-	0.7506	1.0542	32N	116E	41	265	04m14s
-1249-Aug-27	18:09:09	29945	1185	-40177	44	A	p-	-0.7015	0.9549	26S	14E	45	225	04m50s
-1248-Jan-23	12:36:14	29937	1184	-40172	11	P	-t	-1.2526	0.5313	64S	96W	0		
-1248-Feb-22	01:18:54	29935	1184	-40171	49	Pb	t-	1.5182	0.0489	62N	131W	0		
-1248-Jul-17	16:45:29	29927	1183	-40166	16	P	-t	1.2508	0.5369	64N	153W	0		
-1248-Aug-16	02:16:35	29926	1183	-40165	54	P	t-	-1.3815	0.2966	62S	141W	0		
-1247-Jan-11	15:49:09	29918	1182	-40160	21	A	-p	-0.5819	0.9260	58S	82E	54	343	06m56s
-1247-Jul-07	09:17:44	29908	1180	-40154	26	T	-p	0.5070	1.0745	54N	170E	59	281	05m14s
-1247-Dec-31	15:00:59	29899	1179	-40148	31	A	nn	0.1085	0.9259	18S	80E	84	280	10m06s
-1246-Jun-27	01:44:38	29889	1178	-40142	36	T	n-	-0.2323	1.0522	10N	84W	77	178	05m13s
-1246-Dec-20	17:50:53	29880	1177	-40136	41	A	p-	0.7920	0.9591	29N	36E	37	244	04m36s
-1245-Jun-16	13:33:25	29870	1175	-40130	46	P	t-	-1.0383	0.9175	67S	105E	0		
-1245-Nov-10	16:27:09	29862	1174	-40125	13	P	-t	-1.3012	0.4418	70S	79W	0		
-1245-Dec-10	03:55:40	29861	1174	-40124	51	P	t-	1.4218	0.2220	68N	104W	0		
-1244-May-06	03:36:15	29853	1173	-40119	18	A	-t	0.9762	0.9375	76N	156E	12	1143	04m16s
-1244-Oct-30	08:07:30	29844	1172	-40113	23	T	-p	-0.6451	1.0377	49S	164E	50	165	02m48s
-1243-Apr-25	04:55:24	29834	1171	-40107	28	A	nn	0.2011	0.9677	20N	134W	78	119	03m45s
-1243-Oct-19	21:43:29	29825	1169	-40101	33	H	nn	0.0304	1.0006	5S	23W	88	2	00m04s
-1242-Apr-14	12:12:54	29815	1168	-40095	38	T	p-	-0.5723	1.0155	29S	133E	55	65	01m29s
-1242-Oct-09	05:05:53	29806	1167	-40089	43	A	p-	0.7633	0.9428	45N	114W	40	324	05m33s
-1241-Mar-05	18:30:06	29798	1166	-40084	10	P	-t	1.2694	0.5013	71N	27W	0		
-1241-Apr-04	02:11:47	29796	1166	-40083	48	P	t-	-1.2782	0.4843	72S	1E	0		
-1241-Aug-29	11:52:27	29788	1165	-40078	15	P	-t	-1.5202	0.0788	70S	81E	0		
-1241-Sep-28	05:49:54	29787	1164	-40077	53	P	t-	1.4789	0.1526	72N	46W	0		
-1240-Feb-23	10:53:10	29779	1163	-40072	20	T	-p	0.5820	1.0442	21N	137E	54	181	04m06s

-1240-Aug-17	14:46:27	29769	1162	-40066	25	A	-p	-0.7574	0.9709	31S	73E	41	159	03m08s
-1239-Feb-11	23:15:42	29760	1161	-40060	30	A	nn	-0.1446	0.9918	26S	38W	82	29	00m52s
-1239-Aug-07	01:03:42	29751	1160	-40054	35	T	nn	0.0138	1.0354	21N	71W	89	119	03m28s
-1238-Feb-01	04:20:01	29741	1158	-40048	40	A	p-	-0.9017	0.9321	82S	65W	25	597	04m52s
-1238-Jul-27	16:47:26	29732	1157	-40042	45	T	p-	0.7315	1.0651	69N	60E	43	314	04m04s
-1238-Dec-22	09:51:27	29724	1156	-40037	12	P	-t	1.4103	0.2648	65N	180W	0		
-1237-Jun-18	01:14:15	29714	1155	-40031	17	P	-t	-1.1073	0.8051	64S	46W	0		
-1237-Jul-17	09:28:27	29713	1155	-40030	55	P	t-	1.4590	0.1405	67N	18W	0		
-1237-Dec-11	14:38:24	29705	1154	-40025	22	A	-p	0.6671	0.9762	19N	94E	48	113	02m37s
-1236-Jun-06	11:11:12	29695	1153	-40019	27	A	-p	-0.3678	0.9838	0N	140E	68	61	01m54s
-1236-Nov-30	02:28:00	29686	1151	-40013	32	T	n-	-0.0450	1.0308	23S	96W	87	104	02m46s
-1235-May-26	14:07:46	29677	1150	-40007	37	A	p-	0.4110	0.9502	41N	78E	66	199	05m03s
-1235-Nov-19	17:56:40	29667	1149	-40001	42	T	p-	-0.7071	1.0396	57S	3E	45	187	02m36s
-1234-May-15	14:56:23	29658	1148	-39995	47	P	t-	1.1644	0.6840	62N	44W	0		
-1234-Oct-10	19:18:14	29650	1147	-39990	14	P	-t	1.3889	0.2898	61N	98E	0		
-1234-Nov-09	08:22:29	29648	1146	-39989	52	P	t-	-1.4062	0.2530	62S	58E	0		
-1233-Apr-05	11:03:35	29640	1145	-39984	19	T	-p	-0.7872	1.0261	43S	171E	38	140	01m59s
-1233-Sep-30	00:38:39	29631	1144	-39978	24	A	-p	0.7378	0.9334	42N	38W	42	358	06m12s
-1232-Mar-25	02:15:32	29622	1143	-39972	29	Tm	nn	-0.0245	1.0707	4S	87W	89	230	05m45s
-1232-Sep-18	00:24:46	29612	1142	-39966	34	A	nn	0.0442	0.9261	9N	62W	87	278	08m36s
-1231-Mar-14	19:09:14	29603	1140	-39960	39	T	p-	0.7024	1.0564	32N	4W	45	256	04m20s
-1231-Sep-07	01:43:30	29593	1139	-39954	44	A	p-	-0.6624	0.9550	26S	102W	48	213	04m40s
-1230-Feb-02	20:30:19	29585	1138	-39949	11	P	-t	-1.2826	0.4788	63S	134E	0		
-1230-Mar-04	09:01:46	29584	1138	-39948	49	P	t-	1.4800	0.1186	61N	103E	0		
-1230-Jul-29	00:24:40	29576	1137	-39943	16	P	-t	1.3031	0.4380	64N	81E	0		
-1230-Aug-27	10:08:22	29575	1137	-39942	54	P	t-	-1.3378	0.3768	62S	90E	0		
-1229-Jan-22	23:28:23	29567	1136	-39937	21	A	-p	-0.6068	0.9271	58S	28W	52	344	06m42s
-1229-Jul-18	16:57:29	29557	1135	-39931	26	T	-p	0.5688	1.0709	57N	60E	55	281	04m49s
-1228-Jan-11	22:48:13	29548	1133	-39925	31	A	nn	0.0910	0.9295	18S	37W	85	265	09m19s
-1228-Jul-07	09:08:48	29538	1132	-39919	36	T	nn	-0.1654	1.0474	14N	164E	81	160	04m41s
-1228-Dec-31	02:05:43	29529	1131	-39913	41	A	p-	0.7811	0.9641	28N	92W	38	208	04m02s
-1227-Jun-26	20:27:05	29520	1130	-39907	46	A	t-	-0.9667	0.9820	52S	9W	14	258	01m37s
-1227-Nov-21	01:19:16	29512	1129	-39902	13	P	-t	-1.2988	0.4463	69S	133E	0		

-1227-Dec-20	12:37:08	29510	1129	-39901	51	P	t-	1.4156	0.2324	67N	113E	0		
-1226-May-17	09:52:55	29502	1127	-39896	18	P	-t	1.0643	0.8523	70N	10E	0		
-1226-Nov-10	16:58:26	29493	1126	-39890	23	T	-p	-0.6463	1.0355	53S	31E	49	156	02m35s
-1225-May-06	11:28:35	29484	1125	-39884	28	A	nn	0.2842	0.9711	29N	125E	73	108	03m12s
-1225-Oct-31	06:16:54	29474	1124	-39878	33	Am	nn	0.0275	0.9963	9S	153W	88	13	00m24s
-1224-Apr-24	19:18:40	29465	1123	-39872	38	T	p-	-0.4971	1.0216	20S	21E	60	84	02m09s
-1224-Oct-19	13:10:55	29455	1121	-39866	43	A	p-	0.7557	0.9386	41N	120E	41	344	06m19s
-1223-Mar-16	02:22:39	29447	1120	-39861	10	P	-t	1.3183	0.4070	71N	160W	0		
-1223-Apr-14	09:42:40	29446	1120	-39860	48	P	t-	-1.2118	0.6121	72S	127W	0		
-1223-Sep-08	19:13:43	29438	1119	-39855	15	Pe	-t	-1.5549	0.0211	71S	44W	0		
-1223-Oct-08	13:32:54	29437	1119	-39854	53	P	t-	1.4615	0.1824	72N	177W	0		
-1222-Mar-05	18:48:26	29429	1118	-39849	20	T	-p	0.6279	1.0444	27N	14E	51	189	03m56s
-1222-Aug-28	22:21:06	29419	1117	-39843	25	A	-p	-0.7960	0.9701	37S	46W	37	176	03m01s
-1221-Feb-23	06:57:53	29410	1116	-39837	30	A	nn	-0.1047	0.9918	20S	156W	84	29	00m53s
-1221-Aug-18	08:54:00	29401	1114	-39831	35	T	nn	-0.0317	1.0351	16N	169E	88	118	03m27s
-1220-Feb-12	11:46:58	29391	1113	-39825	40	A	p-	-0.8675	0.9343	74S	168E	29	497	05m01s
-1220-Aug-07	00:39:52	29382	1112	-39819	45	T	p-	0.6802	1.0636	62N	56W	47	285	04m11s
-1219-Jan-01	17:50:04	29374	1111	-39814	12	P	-t	1.4186	0.2498	66N	49E	0		
-1219-Jun-28	08:27:58	29365	1110	-39808	17	P	-t	-1.1818	0.6649	65S	166W	0		
-1219-Jul-27	17:06:44	29363	1110	-39807	55	P	t-	1.4065	0.2417	68N	145W	0		
-1219-Dec-21	23:06:06	29355	1109	-39802	22	A	-p	0.6688	0.9806	18N	37W	48	93	02m10s
-1218-Jun-17	17:52:31	29346	1107	-39796	27	A	-p	-0.4511	0.9790	3S	38E	63	83	02m34s
-1218-Dec-11	11:16:31	29336	1106	-39790	32	T	n-	-0.0438	1.0336	25S	132E	87	114	03m03s
-1217-Jun-06	20:26:48	29327	1105	-39784	37	A	pn	0.3225	0.9495	39N	14W	71	196	05m24s
-1217-Dec-01	02:49:43	29318	1104	-39778	42	T	p-	-0.7068	1.0392	61S	130W	45	186	02m33s
-1216-May-25	21:23:10	29308	1102	-39772	47	P	t-	1.0769	0.8362	62N	151W	0		
-1216-Oct-21	03:40:46	29300	1101	-39767	14	P	-t	1.4004	0.2707	61N	38W	0		
-1216-Nov-19	17:05:13	29299	1101	-39766	52	P	t-	-1.4103	0.2462	62S	83W	0		
-1215-Apr-15	18:21:41	29291	1100	-39761	19	T	-p	-0.8526	1.0299	44S	62E	31	189	02m14s
-1215-Oct-10	08:30:30	29282	1099	-39755	24	A	-p	0.7559	0.9289	39N	159W	41	395	06m53s
-1214-Apr-05	09:53:55	29272	1098	-39749	29	T	nn	-0.0872	1.0743	3S	157E	85	242	06m00s
-1214-Sep-29	08:01:42	29263	1097	-39743	34	A	nn	0.0689	0.9240	6N	177W	86	287	08m49s
-1213-Mar-26	02:51:16	29254	1095	-39737	39	T	p-	0.6460	1.0582	32N	120W	50	246	04m26s

-1213-Sep-18	09:29:58	29244	1094	-39731	44	A	p-	-0.6322	0.9552	28S	139E	51	206	04m29s
-1212-Feb-14	04:12:22	29236	1093	-39726	11	P	-t	-1.3216	0.4104	62S	8E	0		
-1212-Mar-14	16:33:15	29235	1093	-39725	49	P	t-	1.4333	0.2037	61N	20W	0		
-1212-Aug-08	08:12:48	29227	1092	-39720	16	P	-t	1.3487	0.3519	63N	47W	0		
-1212-Sep-06	18:10:33	29226	1092	-39719	54	P	t-	-1.3016	0.4430	61S	40W	0		
-1211-Feb-02	06:57:56	29218	1091	-39714	21	A	-p	-0.6392	0.9285	56S	136W	50	347	06m28s
-1211-Jul-29	00:43:33	29208	1090	-39708	26	T	-p	0.6252	1.0668	58N	50W	51	280	04m25s
-1210-Jan-22	06:29:09	29199	1088	-39702	31	A	nn	0.0679	0.9337	18S	153W	86	248	08m26s
-1210-Jul-18	16:35:38	29190	1087	-39696	36	Tm	nn	-0.1016	1.0419	18N	51E	84	141	04m04s
-1209-Jan-11	10:16:56	29180	1086	-39690	41	A	p-	0.7664	0.9697	26N	141E	40	169	03m21s
-1209-Jul-08	03:22:42	29171	1085	-39684	46	A	p-	-0.8973	0.9796	40S	118W	26	165	02m03s
-1209-Dec-02	10:11:56	29163	1084	-39679	13	P	-t	-1.2966	0.4505	68S	13W	0		
-1209-Dec-31	21:15:01	29162	1084	-39678	51	P	t-	1.4061	0.2490	66N	29W	0		
-1208-May-27	16:09:55	29154	1083	-39673	18	P	-t	1.1518	0.7027	69N	97W	0		
-1208-Nov-21	01:51:11	29144	1082	-39667	23	T	-p	-0.6462	1.0337	57S	101W	49	149	02m24s
-1207-May-16	18:02:25	29135	1080	-39661	28	A	-p	0.3674	0.9740	37N	23E	68	100	02m42s
-1207-Nov-10	14:52:24	29126	1079	-39655	33	A	nn	0.0271	0.9924	13S	76E	89	27	00m49s
-1206-May-06	02:23:41	29116	1078	-39649	38	T	p-	-0.4199	1.0271	11S	90W	65	101	02m47s
-1206-Oct-30	21:19:14	29107	1077	-39643	43	A	p-	0.7518	0.9350	37N	6W	41	363	07m04s
-1205-Mar-27	10:07:56	29099	1076	-39638	10	P	-t	1.3731	0.3007	72N	68E	0		
-1205-Apr-25	17:09:47	29098	1076	-39637	48	P	t-	-1.1419	0.7475	71S	106E	0		
-1205-Oct-19	21:22:39	29088	1074	-39631	53	P	t-	1.4494	0.2032	72N	50E	0		
-1204-Mar-16	02:35:02	29080	1073	-39626	20	T	-p	0.6802	1.0439	35N	109W	47	198	03m41s
-1204-Sep-08	06:06:12	29071	1072	-39620	25	A	-p	-0.8267	0.9694	43S	168W	34	194	02m52s
-1203-Mar-05	14:30:04	29062	1071	-39614	30	A	nn	-0.0574	0.9916	14S	89E	87	30	00m55s
-1203-Aug-28	16:54:03	29053	1070	-39608	35	T	nn	-0.0695	1.0347	10N	47E	86	117	03m24s
-1202-Feb-22	19:02:11	29043	1069	-39602	40	A	p-	-0.8241	0.9367	66S	49E	34	417	05m12s
-1202-Aug-18	08:40:22	29034	1067	-39596	45	T	p-	0.6356	1.0613	56N	176W	50	261	04m15s
-1201-Jan-13	01:42:03	29026	1066	-39591	12	P	-t	1.4325	0.2249	67N	81W	0		
-1201-Feb-11	18:52:01	29025	1066	-39590	50	Pb	t-	-1.5352	0.0539	69S	170E	0		
-1201-Jul-09	15:45:05	29017	1065	-39585	17	P	-t	-1.2522	0.5335	66S	73E	0		
-1201-Aug-08	00:52:21	29015	1065	-39584	55	P	t-	1.3605	0.3298	69N	86E	0		
-1200-Jan-02	07:28:30	29007	1064	-39579	22	A	-p	0.6756	0.9855	19N	166W	47	69	01m37s

-1200-Jun-28	00:36:31	28998	1063	-39573	27	A	-p	-0.5309	0.9736	8S	65W	58	111	03m19s
-1200-Dec-21	20:02:33	28989	1062	-39567	32	Tm	nn	-0.0404	1.0370	26S	0E	88	124	03m22s

12TH CENTURY BCE

In the 12th century BCE the total number of solar eclipses was 252 solar eclipses: 93 partial solar eclipses, 89 annular solar eclipses (87 central annular solar eclipses with two limits, 2 central annular solar eclipses with one limit, 0 non-central annular solar eclipses with one limit), 63 total solar eclipses (61 central total solar eclipses with two limits, 2 central total solar eclipses with one limit, 0 non-central total solar eclipses with one limit), 7 hybrid solar eclipses.

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°	°	ALT	WIDTH	DUR.
	GREATEST		S									°	km	
	ECLIPSE													

-1199-Jun-17	02:46:31	28979	1060	-39561	37	A	nn	0.2347	0.9482	36N	107W	76	196	05m51s
-1199-Dec-11	11:42:37	28970	1059	-39555	42	T	p-	-0.7067	1.0393	65S	100E	45	187	02m32s
-1198-Jun-06	03:50:17	28961	1058	-39549	47	An	t-	0.9887	0.9523	69N	114E	8	-	02m50s
-1198-Nov-01	12:07:44	28953	1057	-39544	14	P	-t	1.4079	0.2584	61N	175W	0		
-1198-Dec-01	01:48:11	28951	1057	-39543	52	P	t-	-1.4149	0.2384	63S	136E	0		
-1197-Apr-27	01:35:11	28944	1056	-39538	19	T	-t	-0.9226	1.0324	48S	44W	22	278	02m21s
-1197-Oct-21	16:28:58	28934	1055	-39532	24	A	-p	0.7682	0.9251	37N	78E	40	426	07m35s
-1196-Apr-15	17:27:59	28925	1054	-39526	29	T	-n	-0.1540	1.0772	2S	43E	81	252	06m16s
-1196-Oct-09	15:45:58	28916	1052	-39520	34	A	nn	0.0880	0.9223	2N	65E	85	294	09m03s
-1195-Apr-05	10:28:06	28906	1051	-39514	39	T	p-	0.5855	1.0594	32N	125E	54	237	04m30s
-1195-Sep-28	17:24:58	28897	1050	-39508	44	A	p-	-0.6081	0.9555	30S	18E	52	200	04m18s

-1194-Feb-24	11:44:56	28889	1049	-39503	11	P	-t	-1.3674	0.3301	61S	115W	0			
-1194-Mar-25	23:56:02	28888	1049	-39502	49	P	t-	1.3804	0.3003	61N	141W	0			
-1194-Aug-19	16:08:49	28880	1048	-39497	16	P	-t	1.3886	0.2767	62N	176W	0			
-1194-Sep-18	02:21:33	28879	1048	-39496	54	P	t-	-1.2719	0.4974	61S	173W	0			
-1193-Feb-13	14:17:55	28871	1047	-39491	21	A	-p	-0.6791	0.9300	55S	118E	47	354	06m14s	
-1193-Aug-09	08:37:06	28861	1046	-39485	26	T	-p	0.6755	1.0623	58N	163W	47	276	04m02s	
-1192-Feb-02	14:01:05	28852	1044	-39479	31	A	nn	0.0366	0.9381	18S	94E	88	230	07m33s	
-1192-Jul-29	00:09:36	28843	1043	-39473	36	T	nn	-0.0442	1.0360	19N	63W	88	121	03m26s	
-1191-Jan-21	18:21:31	28834	1042	-39467	41	A	p-	0.7450	0.9758	25N	16E	42	128	02m36s	
-1191-Jul-18	10:22:36	28824	1041	-39461	46	A	p-	-0.8319	0.9758	32S	133E	33	155	02m35s	
-1191-Dec-12	19:02:46	28817	1040	-39456	13	P	-t	-1.2965	0.4507	67S	159W	0			
-1190-Jan-11	05:47:31	28815	1040	-39455	51	P	t-	1.3916	0.2748	65N	168W	0			
-1190-Jun-07	22:27:31	28807	1039	-39450	18	P	-t	1.2386	0.5541	68N	155E	0			
-1190-Dec-02	10:42:52	28798	1037	-39444	23	T	-p	-0.6468	1.0326	61S	129E	49	145	02m17s	
-1189-May-28	00:36:22	28789	1036	-39438	28	A	-p	0.4514	0.9763	46N	77W	63	95	02m18s	
-1189-Nov-21	23:29:04	28779	1035	-39432	33	A	nn	0.0281	0.9891	16S	54W	88	38	01m11s	
-1188-May-16	09:28:19	28770	1034	-39426	38	T	p-	-0.3415	1.0319	4S	160E	70	114	03m20s	
-1188-Nov-10	05:30:16	28761	1033	-39420	43	A	p-	0.7505	0.9320	33N	133W	41	382	07m47s	
-1187-Apr-06	17:47:19	28753	1032	-39415	10	P	-t	1.4329	0.1842	72N	62W	0			
-1187-May-06	00:34:32	28752	1032	-39414	48	P	t-	-1.0693	0.8887	71S	20W	0			
-1187-Oct-30	05:18:38	28742	1030	-39408	53	P	t-	1.4419	0.2161	71N	85W	0			
-1186-Mar-27	10:12:30	28734	1029	-39403	20	T	-p	0.7398	1.0429	43N	131E	42	211	03m23s	
-1186-Sep-19	14:01:57	28725	1028	-39397	25	A	-p	-0.8497	0.9689	49S	66E	31	210	02m44s	
-1185-Mar-16	21:52:04	28716	1027	-39391	30	A	nn	-0.0024	0.9912	6S	25W	90	31	00m59s	
-1185-Sep-09	01:03:47	28707	1026	-39385	35	T	nn	-0.0999	1.0341	5N	78W	84	116	03m19s	
-1184-Mar-05	02:07:49	28697	1025	-39379	40	A	p-	-0.7731	0.9391	58S	65W	39	355	05m26s	
-1184-Aug-28	16:49:25	28688	1024	-39373	45	T	p-	0.5980	1.0587	49N	61E	53	241	04m16s	
-1183-Jan-23	09:29:11	28680	1023	-39368	12	P	-t	1.4508	0.1923	68N	150E	0			
-1183-Feb-22	02:05:07	28679	1022	-39367	50	P	t-	-1.4910	0.1266	70S	48E	0			
-1183-Jul-19	23:05:35	28671	1021	-39362	17	P	-t	-1.3188	0.4106	67S	49W	0			
-1183-Aug-18	08:43:29	28670	1021	-39361	55	P	t-	1.3195	0.4075	70N	45W	0			
-1182-Jan-12	15:47:20	28662	1020	-39356	22	A	-p	0.6861	0.9908	20N	66E	47	45	01m00s	
-1182-Jul-09	07:23:09	28653	1019	-39350	27	A	-p	-0.6072	0.9678	14S	170W	53	146	04m04s	

-1181-Jan-02	04:43:43	28643	1018	-39344	32	T	nn	-0.0325	1.0408	26S	130W	88	137	03m45s
-1181-Jun-28	09:10:31	28634	1017	-39338	37	A	nn	0.1504	0.9466	32N	159E	81	199	06m23s
-1181-Dec-22	20:30:59	28625	1016	-39332	42	T	p-	-0.7033	1.0399	67S	26W	45	189	02m34s
-1180-Jun-16	10:23:01	28615	1014	-39326	47	A	t-	0.9037	0.9582	78N	65E	25	359	02m48s
-1180-Nov-11	20:35:08	28608	1014	-39321	14	P	-t	1.4144	0.2480	62N	48E	0		
-1180-Dec-11	10:27:06	28606	1013	-39320	52	P	t-	-1.4173	0.2346	64S	5W	0		
-1179-May-07	08:48:31	28599	1012	-39315	19	Ts	-t	-0.9936	1.0315	59S	139W	5	-	02m04s
-1179-Nov-01	00:31:01	28589	1011	-39309	24	A	-p	0.7769	0.9220	34N	46W	39	453	08m17s
-1178-Apr-27	00:56:33	28580	1010	-39303	29	T	-n	-0.2257	1.0793	2S	70W	77	262	06m31s
-1178-Oct-20	23:38:09	28571	1009	-39297	34	A	nn	0.1007	0.9212	2S	55W	84	299	09m18s
-1177-Apr-16	17:56:47	28561	1008	-39291	39	T	p-	0.5189	1.0599	33N	13E	59	228	04m33s
-1177-Oct-10	01:29:56	28552	1007	-39285	44	A	p-	-0.5916	0.9562	33S	105W	54	194	04m07s
-1176-Mar-06	19:05:21	28544	1006	-39280	11	P	-t	-1.4219	0.2346	61S	124E	0		
-1176-Apr-05	07:09:10	28543	1005	-39279	49	P	t-	1.3205	0.4092	61N	100E	0		
-1176-Aug-30	00:15:09	28535	1004	-39274	16	P	-t	1.4208	0.2162	62N	52E	0		
-1176-Sep-28	10:42:46	28534	1004	-39273	54	P	t-	-1.2502	0.5372	61S	51E	0		
-1175-Feb-23	21:27:53	28526	1003	-39268	21	A	-p	-0.7269	0.9315	53S	13E	43	367	06m01s
-1175-Aug-19	16:37:12	28517	1002	-39262	26	T	-p	0.7201	1.0574	57N	81E	44	271	03m41s
-1174-Feb-12	21:26:01	28508	1001	-39256	31	A	nn	-0.0011	0.9430	17S	18W	90	211	06m40s
-1174-Aug-09	07:48:37	28498	1000	-39250	36	T	nn	0.0082	1.0297	20N	178W	89	101	02m47s
-1173-Feb-02	02:19:14	28489	999	-39244	41	A	p-	0.7171	0.9825	24N	106W	44	88	01m50s
-1173-Jul-29	17:27:33	28480	997	-39238	46	A	p-	-0.7715	0.9712	27S	24E	39	160	03m10s
-1173-Dec-24	03:51:08	28472	997	-39233	13	P	-t	-1.2989	0.4461	66S	57E	0		
-1172-Jan-22	14:14:28	28471	996	-39232	51	P	t-	1.3722	0.3100	64N	54E	0		
-1172-Jun-18	04:48:19	28463	995	-39227	18	P	-t	1.3223	0.4110	67N	47E	0		
-1172-Jul-17	20:09:52	28461	995	-39226	56	Pb	t-	-1.5510	0.0221	64S	31W	0		
-1172-Dec-12	19:32:31	28454	994	-39221	23	T	-p	-0.6489	1.0318	63S	1E	49	142	02m12s
-1171-Jun-07	07:14:17	28444	993	-39215	28	A	-p	0.5329	0.9782	54N	177W	58	92	01m58s
-1171-Dec-02	08:04:41	28435	992	-39209	33	A	nn	0.0292	0.9864	19S	176E	88	48	01m29s
-1170-May-27	16:33:33	28426	991	-39203	38	T	n-	-0.2625	1.0360	4N	50E	75	125	03m46s
-1170-Nov-21	13:41:50	28417	990	-39197	43	A	p-	0.7503	0.9296	30N	100E	41	397	08m26s
-1169-Apr-18	01:21:29	28409	989	-39192	10	Pe	-t	1.4970	0.0592	71N	169E	0		
-1169-May-17	07:58:21	28407	988	-39191	48	Ts	t-	-0.9954	1.0601	67S	151W	3	-	03m45s

-1169-Nov-10	13:17:14	28398	987	-39185	53	P	t-	1.4363	0.2256	70N	141E	0			
-1168-Apr-06	17:42:52	28390	986	-39180	20	T	-p	0.8046	1.0409	52N	10E	36	229	02m59s	
-1168-Sep-29	22:07:28	28381	985	-39174	25	A	-p	-0.8657	0.9689	54S	62W	30	222	02m34s	
-1167-Mar-27	05:04:24	28372	984	-39168	30	A	nn	0.0596	0.9904	1N	137W	87	34	01m04s	
-1167-Sep-19	09:21:55	28363	983	-39162	35	T	nn	-0.1238	1.0336	1S	155E	83	114	03m14s	
-1166-Mar-16	09:02:44	28354	982	-39156	40	A	p-	-0.7137	0.9415	49S	175W	44	307	05m40s	
-1166-Sep-09	01:06:50	28344	981	-39150	45	T	p-	0.5679	1.0558	43N	66W	55	223	04m13s	
-1165-Feb-03	17:06:24	28337	980	-39145	12	P	-t	1.4772	0.1453	69N	22E	0			
-1165-Mar-05	09:06:40	28335	979	-39144	50	P	t-	-1.4371	0.2164	71S	72W	0			
-1165-Jul-31	06:32:01	28327	978	-39139	17	P	-t	-1.3792	0.3005	68S	173W	0			
-1165-Aug-29	16:43:09	28326	978	-39138	55	P	t-	1.2863	0.4698	70N	179W	0			
-1164-Jan-23	23:58:51	28318	977	-39133	22	A	-p	0.7030	0.9964	23N	61W	45	18	00m23s	
-1164-Jul-19	14:14:20	28309	976	-39127	27	A	-p	-0.6787	0.9617	20S	84E	47	189	04m46s	
-1163-Jan-12	13:19:38	28300	975	-39121	32	T	nn	-0.0200	1.0449	25S	101E	89	150	04m08s	
-1163-Jul-08	15:38:52	28291	974	-39115	37	A	nn	0.0699	0.9446	28N	62E	86	205	06m59s	
-1162-Jan-02	05:15:29	28281	973	-39109	42	T	p-	-0.6970	1.0409	68S	148W	46	192	02m40s	
-1162-Jun-27	16:58:51	28272	972	-39103	47	A	p-	0.8202	0.9615	77N	9E	35	246	02m47s	
-1162-Nov-23	05:04:29	28264	971	-39098	14	P	-t	1.4185	0.2416	62N	90W	0			
-1162-Dec-22	19:03:19	28263	970	-39097	52	P	t-	-1.4182	0.2332	65S	145W	0			
-1161-May-18	16:00:37	28255	970	-39092	19	P	-t	-1.0660	0.8869	62S	111E	0			
-1161-Jun-17	00:38:59	28254	969	-39091	57	Pb	t-	1.5270	0.0274	64N	137E	0			
-1161-Nov-12	08:35:53	28246	968	-39086	24	A	-p	0.7827	0.9196	32N	171W	38	475	08m58s	
-1160-May-07	08:23:33	28237	967	-39080	29	T	-n	-0.2988	1.0806	2S	178E	73	271	06m45s	
-1160-Oct-31	07:36:01	28228	966	-39074	34	A	nn	0.1086	0.9207	5S	176W	84	302	09m32s	
-1159-Apr-27	01:21:19	28218	965	-39068	39	T	p-	0.4493	1.0598	33N	98W	63	218	04m35s	
-1159-Oct-20	09:41:25	28209	964	-39062	44	A	p-	-0.5796	0.9571	37S	130E	54	188	03m55s	
-1158-Mar-18	02:17:08	28202	963	-39057	11	P	-t	-1.4824	0.1287	61S	6E	0			
-1158-Apr-16	14:15:35	28200	963	-39056	49	P	t-	1.2560	0.5264	61N	17W	0			
-1158-Sep-10	08:29:39	28192	962	-39051	16	P	-t	1.4472	0.1670	61N	82W	0			
-1158-Oct-09	19:11:05	28191	962	-39050	54	P	t-	-1.2335	0.5679	61S	86W	0			
-1157-Mar-07	04:27:14	28183	961	-39045	21	A	-p	-0.7831	0.9329	52S	89W	38	395	05m49s	
-1157-Aug-31	00:45:59	28174	959	-39039	26	T	-p	0.7574	1.0524	55N	39W	40	263	03m23s	
-1156-Feb-24	04:42:11	28165	958	-39033	31	A	nn	-0.0469	0.9480	16S	127W	87	191	05m52s	

-1156-Aug-19	15:34:49	28156	957	-39027	36	T	nn	0.0539	1.0233	20N	66E	87	80	02m09s
-1155-Feb-12	10:09:24	28147	956	-39021	41	A	p-	0.6818	0.9893	23N	133E	47	50	01m04s
-1155-Aug-09	00:39:20	28137	955	-39015	46	A	p-	-0.7171	0.9662	24S	87W	44	172	03m44s
-1154-Jan-03	12:33:58	28130	954	-39010	13	P	-t	-1.3061	0.4323	65S	86W	0		
-1154-Feb-01	22:33:06	28128	954	-39009	51	P	t-	1.3457	0.3588	63N	82W	0		
-1154-Jun-29	11:12:47	28120	953	-39004	18	P	-t	1.4027	0.2738	66N	61W	0		
-1154-Jul-29	02:52:45	28119	953	-39003	56	P	t-	-1.4856	0.1350	63S	143W	0		
-1154-Dec-24	04:18:05	28111	952	-38998	23	T	-p	-0.6541	1.0314	65S	123W	49	141	02m09s
-1153-Jun-18	13:56:17	28102	951	-38992	28	A	-p	0.6119	0.9793	61N	85E	52	93	01m44s
-1153-Dec-13	16:36:43	28093	949	-38986	33	A	nn	0.0278	0.9844	21S	47E	89	55	01m43s
-1152-Jun-06	23:41:51	28084	948	-38980	38	T	n-	-0.1850	1.0392	11N	60W	79	134	04m04s
-1152-Dec-01	21:53:34	28075	947	-38974	43	A	p-	0.7505	0.9280	28N	27W	41	409	08m57s
-1151-May-27	15:20:53	28065	946	-38968	48	T	t-	-0.9200	1.0676	47S	77E	23	567	05m04s
-1151-Nov-20	21:19:20	28056	945	-38962	53	P	t-	1.4332	0.2307	69N	6E	0		
-1150-Apr-18	01:05:40	28049	944	-38957	20	T	-t	0.8751	1.0378	62N	114W	29	263	02m31s
-1150-Oct-11	06:21:48	28039	943	-38951	25	A	-p	-0.8749	0.9693	59S	168E	29	227	02m24s
-1149-Apr-07	12:07:11	28030	942	-38945	30	A	nn	0.1285	0.9893	9N	114E	83	38	01m11s
-1149-Sep-30	17:49:06	28021	941	-38939	35	T	-n	-0.1405	1.0331	6S	26E	82	113	03m09s
-1148-Mar-26	15:49:38	28012	939	-38933	40	A	p-	-0.6483	0.9436	40S	77E	49	271	05m55s
-1148-Sep-19	09:30:57	28003	938	-38927	45	T	p-	0.5436	1.0528	37N	165E	57	207	04m10s
-1147-Feb-14	00:37:48	27995	937	-38922	12	P	-t	1.5085	0.0891	70N	104W	0		
-1147-Mar-15	16:02:33	27994	937	-38921	50	P	t-	-1.3779	0.3161	72S	169E	0		
-1147-Aug-10	14:03:59	27986	936	-38916	17	P	-t	-1.4339	0.2021	69S	60E	0		
-1147-Sep-09	00:49:13	27984	936	-38915	55	P	t-	1.2591	0.5204	71N	45E	0		
-1146-Feb-03	08:04:01	27977	935	-38910	22	H	-p	0.7261	1.0022	27N	173E	43	11	00m13s
-1146-Jul-30	21:10:45	27968	934	-38904	27	A	-p	-0.7448	0.9554	27S	25W	42	244	05m22s
-1145-Jan-23	21:48:38	27958	933	-38898	32	T	nn	-0.0014	1.0493	22S	27W	90	164	04m33s
-1145-Jul-19	22:14:47	27949	932	-38892	37	Am	nn	-0.0045	0.9423	23N	37W	90	213	07m36s
-1144-Jan-13	13:52:09	27940	931	-38886	42	T	p-	-0.6847	1.0423	67S	91E	46	195	02m48s
-1144-Jul-07	23:43:46	27931	929	-38880	47	A	p-	0.7430	0.9638	72N	70W	42	197	02m48s
-1144-Dec-03	13:31:38	27923	929	-38875	14	P	-t	1.4234	0.2336	63N	133E	0		
-1143-Jan-02	03:33:01	27922	928	-38874	52	P	t-	-1.4150	0.2391	66S	76E	0		
-1143-May-28	23:13:45	27914	927	-38869	19	P	-t	-1.1381	0.7511	63S	8W	0		

-1143-Jun-27	07:46:38	27913	927	-38868	57	P	t-	1.4503	0.1680	65N	19E	0		
-1143-Nov-22	16:41:23	27905	926	-38863	24	A	-p	0.7873	0.9179	30N	63E	38	493	09m36s
-1142-May-18	15:47:51	27896	925	-38857	29	T	-n	-0.3740	1.0809	4S	65E	68	280	06m56s
-1142-Nov-11	15:37:57	27887	924	-38851	34	Am	nn	0.1137	0.9209	9S	62E	84	301	09m43s
-1141-May-08	08:40:00	27878	923	-38845	39	T	n-	0.3752	1.0587	33N	153E	68	207	04m36s
-1141-Oct-31	18:00:23	27868	922	-38839	44	A	p-	-0.5730	0.9586	41S	3E	55	181	03m41s
-1140-Mar-28	09:18:15	27861	921	-38834	11	Pe	-t	-1.5502	0.0098	61S	109W	0		
-1140-Apr-26	21:14:42	27859	921	-38833	49	P	t-	1.1861	0.6528	61N	132W	0		
-1140-Sep-20	16:52:40	27852	920	-38828	16	P	-t	1.4674	0.1293	61N	142E	0		
-1140-Oct-20	03:46:21	27850	920	-38827	54	P	t-	-1.2219	0.5890	61S	135E	0		
-1139-Mar-17	11:17:41	27843	919	-38822	21	A	-p	-0.8461	0.9338	52S	172E	32	452	05m38s
-1139-Sep-10	09:02:20	27833	918	-38816	26	T	-p	0.7885	1.0474	52N	163W	38	253	03m05s
-1138-Mar-06	11:49:54	27824	916	-38810	31	Am	nn	-0.1002	0.9532	15S	125E	84	172	05m07s
-1138-Aug-30	23:27:53	27815	915	-38804	36	H3	nn	0.0930	1.0168	18N	53W	85	58	01m32s
-1137-Feb-23	17:52:28	27806	914	-38798	41	A	p-	0.6399	0.9965	22N	15E	50	16	00m20s
-1137-Aug-20	07:58:01	27797	913	-38792	46	A	p-	-0.6692	0.9610	22S	161E	48	186	04m17s
-1136-Jan-14	21:11:25	27789	912	-38787	13	P	-t	-1.3182	0.4094	64S	133E	0		
-1136-Feb-13	06:45:06	27788	912	-38786	51	P	t-	1.3135	0.4189	62N	145E	0		
-1136-Jul-09	17:44:07	27780	911	-38781	18	P	-t	1.4774	0.1466	65N	170W	0		
-1136-Aug-08	09:43:49	27779	911	-38780	56	P	t-	-1.4264	0.2365	63S	104E	0		
-1135-Jan-03	12:59:20	27771	910	-38775	23	T	-p	-0.6628	1.0314	65S	114E	48	142	02m08s
-1135-Jun-28	20:43:17	27762	909	-38769	28	A	-p	0.6877	0.9799	67N	11W	46	99	01m34s
-1135-Dec-24	01:04:54	27753	908	-38763	33	A	nn	0.0241	0.9828	22S	80W	89	61	01m54s
-1134-Jun-18	06:53:38	27744	907	-38757	38	T	nn	-0.1093	1.0418	17N	170W	84	141	04m13s
-1134-Dec-13	06:00:58	27734	905	-38751	43	A	p-	0.7478	0.9270	26N	153W	41	414	09m19s
-1133-Jun-07	22:45:17	27725	904	-38745	48	T	p-	-0.8459	1.0708	36S	43W	32	433	05m48s
-1133-Dec-02	05:20:23	27716	903	-38739	53	P	t-	1.4288	0.2379	68N	127W	0		
-1132-Apr-28	08:23:41	27709	902	-38734	20	T	-t	0.9484	1.0331	73N	107E	18	360	01m58s
-1132-Oct-21	14:42:12	27700	901	-38728	25	A	-p	-0.8801	0.9703	64S	37E	28	225	02m12s
-1131-Apr-17	19:02:39	27690	900	-38722	30	A	nn	0.2023	0.9877	18N	6E	78	44	01m21s
-1131-Oct-11	02:23:27	27681	899	-38716	35	T	-n	-0.1517	1.0329	11S	105W	81	112	03m05s
-1130-Apr-06	22:25:55	27672	898	-38710	40	A	p-	-0.5744	0.9456	31S	28W	55	242	06m10s
-1130-Sep-30	18:03:31	27663	897	-38704	45	T	p-	0.5266	1.0498	32N	34E	58	193	04m05s

-1129-Feb-25	07:59:25	27656	896	-38699	12	Pe	-t	1.5482	0.0178	70N	131E	0			
-1129-Mar-26	22:49:00	27654	896	-38698	50	P	t-	-1.3102	0.4313	72S	52E	0			
-1129-Aug-21	21:43:37	27646	895	-38693	17	P	-t	-1.4815	0.1180	70S	68W	0			
-1129-Sep-20	09:03:31	27645	895	-38692	55	P	t-	1.2391	0.5570	71N	94W	0			
-1128-Feb-14	16:00:50	27637	894	-38687	22	H	-p	0.7568	1.0080	32N	49E	41	42	00m46s	
-1128-Aug-10	04:14:45	27628	893	-38681	27	A	-p	-0.8037	0.9490	34S	136W	36	314	05m49s	
-1127-Feb-03	06:11:08	27619	891	-38675	32	T	nn	0.0229	1.0538	18S	153W	89	178	04m59s	
-1127-Jul-30	04:56:44	27610	890	-38669	37	A	nn	-0.0738	0.9398	17N	139W	86	224	08m11s	
-1126-Jan-23	22:23:14	27601	889	-38663	42	T	p-	-0.6683	1.0440	64S	30W	48	198	02m58s	
-1126-Jul-19	06:35:09	27592	888	-38657	47	A	p-	0.6704	0.9653	65N	163W	48	170	02m51s	
-1126-Dec-14	21:56:05	27584	887	-38652	14	P	-t	1.4297	0.2231	64N	4W	0			
-1125-Jan-13	11:55:47	27583	887	-38651	52	P	t-	-1.4073	0.2532	67S	62W	0			
-1125-Jun-09	06:28:53	27575	886	-38646	19	P	-t	-1.2091	0.6165	63S	127W	0			
-1125-Jul-08	15:00:37	27574	886	-38645	57	P	t-	1.3777	0.3015	66N	102W	0			
-1125-Dec-04	00:46:36	27566	885	-38640	24	A	-p	0.7914	0.9169	29N	62W	37	508	10m07s	
-1124-May-28	23:12:49	27557	884	-38634	29	T	-p	-0.4488	1.0804	6S	47W	63	288	07m03s	
-1124-Nov-21	23:41:35	27548	883	-38628	34	A	nn	0.1177	0.9218	12S	60W	83	298	09m52s	
-1123-May-18	15:57:02	27539	882	-38622	39	T	n-	0.3005	1.0568	33N	45E	72	196	04m35s	
-1123-Nov-11	02:22:58	27530	881	-38616	44	A	p-	-0.5686	0.9606	45S	123W	55	172	03m26s	
-1122-May-08	04:08:06	27521	880	-38610	49	P	t-	1.1124	0.7855	62N	115E	0			
-1122-Oct-02	01:23:40	27513	879	-38605	16	P	-t	1.4817	0.1028	61N	4E	0			
-1122-Oct-31	12:26:55	27512	878	-38604	54	P	t-	-1.2144	0.6029	61S	5W	0			
-1121-Mar-28	17:59:15	27504	878	-38599	21	A	-t	-0.9158	0.9341	54S	77E	23	598	05m27s	
-1121-Sep-21	17:26:28	27495	876	-38593	26	T	-p	0.8127	1.0426	50N	70E	35	240	02m50s	
-1120-Mar-16	18:49:53	27486	875	-38587	31	A	nn	-0.1605	0.9582	14S	20E	81	154	04m28s	
-1120-Sep-10	07:29:03	27477	874	-38581	36	H	-n	0.1243	1.0105	16N	174W	83	36	00m57s	
-1119-Mar-06	01:27:56	27468	873	-38575	41	H	p-	0.5907	1.0037	22N	101W	54	16	00m21s	
-1119-Aug-30	15:24:00	27459	872	-38569	46	A	p-	-0.6281	0.9557	22S	47E	51	203	04m47s	
-1118-Jan-25	05:41:28	27451	871	-38564	13	P	-t	-1.3365	0.3743	63S	5W	0			
-1118-Feb-23	14:48:26	27449	871	-38563	51	P	t-	1.2739	0.4935	62N	13E	0			
-1118-Jul-21	00:22:13	27442	870	-38558	18	Pe	-t	1.5467	0.0292	64N	79E	0			
-1118-Aug-19	16:43:56	27440	870	-38557	56	P	t-	-1.3740	0.3258	62S	12W	0			
-1117-Jan-14	21:32:15	27433	869	-38552	23	T	-p	-0.6781	1.0316	64S	7W	47	145	02m08s	

-1117-Jul-10	03:37:38	27424	868	-38546	28	A	-p	0.7581	0.9799	72N	101W	40	110	01m28s
-1116-Jan-04	09:26:38	27415	867	-38540	33	A	nn	0.0154	0.9818	23S	154E	89	65	02m00s
-1116-Jun-28	14:10:04	27406	866	-38534	38	T	nn	-0.0368	1.0436	22N	80E	88	146	04m16s
-1116-Dec-23	14:04:33	27397	865	-38528	43	A	p-	0.7424	0.9267	24N	82E	42	412	09m30s
-1115-Jun-18	06:11:11	27388	863	-38522	48	T	p-	-0.7728	1.0725	28S	160W	39	371	06m18s
-1115-Dec-12	13:21:03	27378	862	-38516	53	P	t-	1.4241	0.2454	67N	100E	0		
-1114-May-09	15:35:09	27371	861	-38511	20	P	-t	1.0261	0.9581	70N	76W	0		
-1114-Jun-07	23:15:57	27369	861	-38510	58	Pb	t-	-1.5123	0.0353	68S	43W	0		
-1114-Nov-01	23:09:40	27362	860	-38505	25	A	-p	-0.8801	0.9718	68S	95W	28	214	02m00s
-1113-Apr-29	01:51:10	27353	859	-38499	30	A	-p	0.2809	0.9855	26N	100W	74	53	01m33s
-1113-Oct-22	11:04:00	27344	858	-38493	35	Tm	-n	-0.1581	1.0330	16S	123E	81	113	03m04s
-1112-Apr-17	04:56:58	27335	857	-38487	40	A	p-	-0.4965	0.9472	22S	131W	60	222	06m25s
-1112-Oct-11	02:42:14	27326	856	-38481	45	T	p-	0.5148	1.0469	26N	98W	59	181	03m59s
-1111-Apr-06	05:30:45	27317	855	-38475	50	P	t-	-1.2379	0.5554	72S	64W	0		
-1111-Sep-01	05:29:06	27309	854	-38470	17	Pe	-t	-1.5232	0.0455	71S	161E	0		
-1111-Sep-30	17:23:31	27308	854	-38469	55	P	t-	1.2246	0.5832	72N	125E	0		
-1110-Feb-24	23:51:24	27300	853	-38464	22	T	-p	0.7932	1.0136	38N	74W	37	76	01m13s
-1110-Aug-21	11:25:59	27291	852	-38458	27	A	-p	-0.8554	0.9425	42S	109E	31	409	06m07s
-1109-Feb-14	14:24:45	27282	851	-38452	32	T	nn	0.0547	1.0583	14S	82E	87	192	05m23s
-1109-Aug-10	11:48:52	27273	850	-38446	37	A	nn	-0.1344	0.9372	12N	116E	82	236	08m39s
-1108-Feb-04	06:45:20	27264	849	-38440	42	T	p-	-0.6452	1.0458	59S	152W	50	200	03m12s
-1108-Jul-29	13:36:16	27255	848	-38434	47	A	p-	0.6049	0.9663	59N	95E	53	153	02m56s
-1108-Dec-25	06:14:36	27247	847	-38429	14	P	-t	1.4398	0.2059	65N	140W	0		
-1107-Jan-23	20:09:43	27246	846	-38428	52	P	t-	-1.3936	0.2779	68S	162E	0		
-1107-Jun-19	13:48:03	27238	846	-38423	19	P	-t	-1.2770	0.4872	64S	112E	0		
-1107-Jul-18	22:22:31	27237	845	-38422	57	P	t-	1.3108	0.4249	67N	136E	0		
-1107-Dec-14	08:48:25	27229	844	-38417	24	A	-p	0.7979	0.9166	29N	173E	37	521	10m27s
-1106-Jun-09	06:37:11	27220	843	-38411	29	T	-p	-0.5240	1.0788	9S	160W	58	297	07m04s
-1106-Dec-03	07:46:03	27211	842	-38405	34	A	nn	0.1212	0.9234	14S	177E	83	291	09m54s
-1105-May-29	23:11:29	27202	841	-38399	39	T	nn	0.2244	1.0541	32N	62W	77	183	04m32s
-1105-Nov-22	10:48:44	27193	840	-38393	44	A	p-	-0.5662	0.9632	49S	110E	55	161	03m09s
-1104-May-18	10:57:30	27184	839	-38387	49	P	t-	1.0362	0.9217	62N	2E	0		
-1104-Oct-12	10:02:34	27176	838	-38382	16	P	-t	1.4901	0.0874	61N	136W	0		

11TH CENTURY BCE

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°	°	ALT	WIDTH	DUR.
GREATEST			S									°	km	
ECLIPSE														

-1099-Jan-25	05:59:01	27097	829	-38329	23	T	-p	-0.6983	1.0318	62S	127W	45	150	02m08s
-1099-Jul-20	10:39:55	27088	828	-38323	28	A	-p	0.8230	0.9795	74N	174E	34	129	01m25s
-1098-Jan-14	17:40:34	27079	827	-38317	33	A	nn	0.0013	0.9811	23S	31E	90	67	02m03s

-1098-Jul-09	21:32:33	27070	826	-38311	38	T	nn	0.0314	1.0447	26N	31W	88	149	04m12s
-1097-Jan-03	22:00:53	27061	824	-38305	43	A	p-	0.7315	0.9271	23N	41W	43	401	09m29s
-1097-Jun-29	13:41:58	27052	823	-38299	48	T	p-	-0.7035	1.0729	21S	83E	45	333	06m33s
-1097-Dec-23	21:16:20	27043	822	-38293	53	P	t-	1.4144	0.2609	66N	31W	0		
-1096-May-19	22:45:01	27035	821	-38288	20	P	-t	1.1042	0.8106	70N	163E	0		
-1096-Jun-18	06:37:18	27034	821	-38287	58	P	t-	-1.4462	0.1634	67S	166W	0		
-1096-Nov-12	07:40:47	27026	820	-38282	25	A	-p	-0.8783	0.9740	72S	134E	28	196	01m47s
-1095-May-09	08:33:42	27017	819	-38276	30	A	-p	0.3634	0.9827	35N	156E	68	66	01m46s
-1095-Nov-01	19:49:42	27008	818	-38270	35	T	-n	-0.1608	1.0335	21S	10W	81	114	03m05s
-1094-Apr-28	11:20:44	26999	817	-38264	40	A	p-	-0.4124	0.9484	13S	128E	66	207	06m37s
-1094-Oct-22	11:27:12	26990	816	-38258	45	T	p-	0.5086	1.0444	22N	128E	59	171	03m54s
-1093-Apr-17	12:05:42	26981	815	-38252	50	P	t-	-1.1589	0.6922	72S	178W	0		
-1093-Oct-12	01:51:00	26972	814	-38246	55	P	t-	1.2168	0.5971	72N	17W	0		
-1092-Mar-07	07:34:30	26965	813	-38241	22	T	-p	0.8366	1.0189	45N	163E	33	117	01m33s
-1092-Aug-31	18:44:45	26956	812	-38235	27	A	-p	-0.9001	0.9361	49S	9W	25	544	06m17s
-1091-Feb-24	22:31:38	26947	811	-38229	32	T	nn	0.0924	1.0627	8S	42W	85	206	05m45s
-1091-Aug-20	18:49:32	26938	810	-38223	37	A	nn	-0.1881	0.9346	6N	8E	79	248	09m00s
-1090-Feb-14	14:58:57	26929	809	-38217	42	T	p-	-0.6153	1.0477	53S	85E	52	201	03m27s
-1090-Aug-09	20:46:35	26920	808	-38211	47	A	p-	0.5459	0.9669	52N	11W	57	142	03m02s
-1089-Jan-05	14:27:33	26912	807	-38206	14	P	-t	1.4537	0.1819	66N	85E	0		
-1089-Feb-04	04:14:58	26911	807	-38205	52	P	t-	-1.3736	0.3138	69S	28E	0		
-1089-Jun-30	21:11:59	26903	806	-38200	19	P	-t	-1.3418	0.3637	65S	11W	0		
-1089-Jul-30	05:52:42	26902	806	-38199	57	P	t-	1.2495	0.5383	68N	11E	0		
-1089-Dec-25	16:45:34	26894	805	-38194	24	A	-p	0.8079	0.9168	30N	49E	36	535	10m34s
-1088-Jun-19	14:04:54	26885	804	-38188	29	T	-p	-0.5962	1.0763	13S	86E	53	307	06m56s
-1088-Dec-13	15:49:30	26876	803	-38182	34	A	nn	0.1260	0.9256	16S	56E	83	282	09m49s
-1087-Jun-09	06:25:05	26867	802	-38176	39	T	nn	0.1483	1.0506	30N	169W	81	170	04m26s
-1087-Dec-02	19:15:17	26858	801	-38170	44	A	p-	-0.5636	0.9664	53S	15W	55	146	02m50s
-1086-May-29	17:44:05	26849	799	-38164	49	A	t-	0.9586	0.9839	71N	75W	16	205	00m58s
-1086-Oct-23	18:46:32	26842	799	-38159	16	P	-t	1.4952	0.0781	61N	83E	0		
-1086-Nov-22	05:58:50	26840	798	-38158	54	P	t-	-1.2074	0.6161	62S	71E	0		
-1085-Apr-19	06:59:52	26833	798	-38153	21	P	-t	-1.0722	0.8386	61S	96W	0		
-1085-Oct-13	10:35:02	26824	796	-38147	26	T	-p	0.8439	1.0338	45N	166E	32	208	02m24s

-1084-Apr-07	08:31:43	26815	795	-38141	31	A	nn	-0.2982	0.9679	12S	174E	73	120	03m22s
-1084-Oct-01	23:51:15	26806	794	-38135	36	A	-n	0.1685	0.9984	9N	63W	80	6	00m09s
-1083-Mar-27	16:19:20	26797	793	-38129	41	T	p-	0.4727	1.0177	23N	34E	62	68	01m33s
-1083-Sep-21	06:39:30	26788	792	-38123	46	A	p-	-0.5667	0.9454	25S	173E	55	239	05m40s
-1082-Feb-15	22:19:01	26781	791	-38118	13	P	-t	-1.3929	0.2658	62S	84E	0		
-1082-Mar-17	06:33:46	26779	791	-38117	51	P	t-	1.1757	0.6814	61N	117E	0		
-1082-Sep-10	07:10:23	26770	790	-38111	56	P	t-	-1.2892	0.4689	61S	111E	0		
-1081-Feb-05	14:15:45	26763	789	-38106	23	T	-p	-0.7264	1.0320	60S	113E	43	157	02m08s
-1081-Jul-31	17:51:41	26754	788	-38100	28	A	-p	0.8807	0.9785	74N	87E	28	163	01m25s
-1080-Jan-26	01:45:16	26745	787	-38094	33	A	nn	-0.0198	0.9808	23S	90W	89	68	02m03s
-1080-Jul-20	05:02:28	26736	786	-38088	38	Tm	nn	0.0941	1.0452	28N	143W	84	151	04m05s
-1079-Jan-14	05:51:03	26727	785	-38082	43	A	p-	0.7160	0.9280	22N	163W	44	384	09m17s
-1079-Jul-09	21:15:25	26718	784	-38076	48	T	p-	-0.6364	1.0723	16S	34W	50	304	06m36s
-1078-Jan-03	05:08:46	26709	783	-38070	53	P	t-	1.4021	0.2807	65N	161W	0		
-1078-May-31	05:51:24	26701	782	-38065	20	P	-t	1.1843	0.6602	69N	43E	0		
-1078-Jun-29	13:59:20	26700	782	-38064	58	P	t-	-1.3809	0.2892	66S	71E	0		
-1078-Nov-23	16:14:46	26693	781	-38059	25	A	-p	-0.8747	0.9769	77S	6E	29	172	01m33s
-1077-May-20	15:12:39	26684	780	-38053	30	A	-p	0.4477	0.9794	44N	54E	63	82	02m00s
-1077-Nov-13	04:39:07	26675	779	-38047	35	T	-n	-0.1609	1.0345	25S	143W	81	118	03m08s
-1076-May-08	17:42:07	26666	778	-38041	40	A	pn	-0.3267	0.9493	5S	28E	71	196	06m46s
-1076-Nov-01	20:15:07	26657	777	-38035	45	T	p-	0.5051	1.0421	18N	7W	60	162	03m50s
-1075-Apr-27	18:39:07	26648	776	-38029	50	P	t-	-1.0776	0.8340	71S	68E	0		
-1075-Oct-22	10:22:40	26639	775	-38023	55	P	t-	1.2133	0.6030	71N	160W	0		
-1074-Mar-18	15:10:37	26631	774	-38018	22	T	-p	0.8863	1.0236	53N	39E	27	173	01m46s
-1074-Sep-12	02:12:09	26623	773	-38012	27	A	-t	-0.9367	0.9299	57S	132W	20	753	06m19s
-1073-Mar-08	06:30:00	26614	772	-38006	32	T	-n	0.1375	1.0668	2S	165W	82	220	06m03s
-1073-Sep-01	02:00:51	26605	771	-38000	37	A	nn	-0.2331	0.9321	0S	102W	77	261	09m13s
-1072-Feb-25	23:03:12	26596	770	-37994	42	T	p-	-0.5782	1.0495	47S	38W	54	201	03m45s
-1072-Aug-20	04:08:27	26587	769	-37988	47	A	p-	0.4956	0.9673	45N	122W	60	135	03m08s
-1071-Jan-15	22:31:56	26579	768	-37983	14	P	-t	1.4735	0.1476	67N	48W	0		
-1071-Feb-14	12:09:43	26578	768	-37982	52	P	t-	-1.3463	0.3630	70S	105W	0		
-1071-Jul-11	04:40:56	26570	767	-37977	19	P	-t	-1.4027	0.2473	66S	135W	0		
-1071-Aug-09	13:31:26	26569	767	-37976	57	P	t-	1.1945	0.6400	69N	117W	0		

-1070-Jan-05	00:36:36	26561	766	-37971	24	A	-p	0.8222	0.9175	32N	73W	34	551	10m26s
-1070-Jun-30	21:35:05	26553	765	-37965	29	T	-p	-0.6660	1.0729	18S	30W	48	317	06m37s
-1070-Dec-24	23:48:59	26544	764	-37959	34	A	nn	0.1343	0.9286	16S	65W	82	270	09m35s
-1069-Jun-20	13:39:31	26535	763	-37953	39	Tm	nn	0.0738	1.0463	27N	83E	86	155	04m16s
-1069-Dec-14	03:41:41	26526	762	-37947	44	A	p-	-0.5607	0.9703	56S	139W	56	129	02m29s
-1068-Jun-09	00:29:11	26517	761	-37941	49	A	p-	0.8805	0.9831	75N	142W	28	128	01m07s
-1068-Nov-03	03:35:21	26509	760	-37936	16	P	-t	1.4968	0.0751	61N	60W	0		
-1068-Dec-02	14:46:41	26508	760	-37935	54	P	t-	-1.2050	0.6207	63S	71W	0		
-1067-Apr-29	13:22:18	26501	759	-37930	21	P	-t	-1.1560	0.6958	61S	158E	0		
-1067-Oct-23	19:18:07	26492	758	-37924	26	T	-p	0.8520	1.0301	42N	31E	31	190	02m13s
-1066-Apr-18	15:14:37	26483	757	-37918	31	A	-p	-0.3749	0.9722	13S	72E	68	106	02m56s
-1066-Oct-13	08:12:02	26474	756	-37912	36	A	-n	0.1814	0.9929	5N	170E	80	25	00m41s
-1065-Apr-07	23:37:34	26465	755	-37906	41	T	p-	0.4059	1.0242	24N	76W	66	89	02m06s
-1065-Oct-02	14:27:41	26456	754	-37900	46	A	p-	-0.5457	0.9407	28S	54E	57	257	06m02s
-1064-Feb-27	06:26:19	26449	753	-37895	13	P	-t	-1.4307	0.1926	61S	48W	0		
-1064-Mar-27	14:17:14	26447	752	-37894	51	P	t-	1.1184	0.7922	61N	9W	0		
-1064-Sep-20	14:37:33	26438	751	-37888	56	P	t-	-1.2577	0.5215	61S	11W	0		
-1063-Feb-15	22:24:55	26431	751	-37883	23	T	-p	-0.7603	1.0320	58S	6W	40	165	02m07s
-1063-Aug-11	01:12:24	26422	750	-37877	28	A	-p	0.9321	0.9770	71N	7W	21	229	01m27s
-1062-Feb-05	09:40:51	26413	749	-37871	33	A	nn	-0.0477	0.9806	22S	151E	87	69	02m02s
-1062-Jul-31	12:40:42	26404	748	-37865	38	T	nn	0.1508	1.0452	30N	103E	81	152	03m57s
-1061-Jan-25	13:30:22	26395	746	-37859	43	A	p-	0.6919	0.9295	21N	79E	46	361	08m56s
-1061-Jul-21	04:56:27	26386	745	-37853	48	T	p-	-0.5755	1.0709	12S	152W	55	281	06m28s
-1060-Jan-14	12:53:36	26377	744	-37847	53	P	t-	1.3828	0.3122	64N	71E	0		
-1060-Jun-10	12:58:13	26370	744	-37842	20	P	-t	1.2628	0.5137	68N	77W	0		
-1060-Jul-09	21:25:49	26368	743	-37841	58	P	t-	-1.3197	0.4064	65S	52W	0		
-1060-Dec-04	00:48:40	26361	743	-37836	25	A	-p	-0.8722	0.9803	81S	116W	29	145	01m17s
-1059-May-30	21:49:06	26352	742	-37830	30	A	-p	0.5333	0.9755	52N	46W	58	104	02m15s
-1059-Nov-23	13:30:08	26343	741	-37824	35	T	-n	-0.1599	1.0360	28S	83E	81	123	03m15s
-1058-May-19	23:58:49	26334	739	-37818	40	A	nn	-0.2371	0.9496	4N	70W	76	190	06m52s
-1058-Nov-13	05:07:11	26325	738	-37812	45	T	n-	0.5054	1.0404	14N	143W	60	156	03m47s
-1057-May-09	01:09:20	26317	737	-37806	50	As	t-	-0.9925	0.9526	66S	53W	5	-	03m47s
-1057-Nov-02	18:58:34	26308	736	-37800	55	P	t-	1.2139	0.6015	71N	56E	0		

-1056-Mar-28	22:40:39	26300	736	-37795	22	T	-t	0.9419	1.0272	63N	89W	19	278	01m49s
-1056-Sep-22	09:47:54	26291	735	-37789	27	A	-t	-0.9659	0.9240	64S	99E	14	1137	06m16s
-1055-Mar-18	14:21:15	26283	734	-37783	32	T	-n	0.1889	1.0706	5N	74E	79	234	06m17s
-1055-Sep-11	09:21:22	26274	733	-37777	37	A	nn	-0.2708	0.9297	6S	145E	74	273	09m20s
-1054-Mar-08	06:59:05	26265	731	-37771	42	T	p-	-0.5346	1.0511	40S	160W	57	200	04m03s
-1054-Aug-31	11:40:21	26256	730	-37765	47	A	p-	0.4528	0.9675	39N	123E	63	131	03m15s
-1053-Jan-27	06:27:19	26248	730	-37760	14	P	-t	1.4996	0.1023	68N	180W	0		
-1053-Feb-25	19:54:23	26247	729	-37759	52	P	t-	-1.3117	0.4252	71S	125E	0		
-1053-Jul-22	12:17:11	26240	729	-37754	19	P	-t	-1.4581	0.1415	67S	99E	0		
-1053-Aug-20	21:19:56	26238	728	-37753	57	P	t-	1.1468	0.7283	70N	112E	0		
-1052-Jan-16	08:21:07	26231	728	-37748	24	A	-p	0.8411	0.9186	35N	166E	32	573	10m03s
-1052-Jul-11	05:09:35	26222	727	-37742	29	T	-p	-0.7318	1.0689	24S	147W	43	330	06m09s
-1051-Jan-04	07:44:32	26213	726	-37736	34	A	nn	0.1462	0.9321	15S	176E	82	256	09m13s
-1051-Jun-30	20:56:04	26204	725	-37730	39	T	nn	0.0022	1.0414	24N	26W	90	139	03m59s
-1051-Dec-24	12:04:43	26195	724	-37724	44	A	p-	-0.5539	0.9748	57S	100E	56	108	02m06s
-1050-Jun-20	07:14:33	26186	722	-37718	49	A	p-	0.8032	0.9806	74N	145E	36	117	01m22s
-1050-Nov-14	12:26:49	26179	722	-37713	16	P	-t	1.4969	0.0748	62N	157E	0		
-1050-Dec-13	23:32:19	26178	721	-37712	54	P	t-	-1.2006	0.6292	64S	146E	0		
-1049-May-10	19:42:11	26170	721	-37707	21	P	-t	-1.2416	0.5495	62S	53E	0		
-1049-Nov-04	04:04:00	26161	720	-37701	26	T	-p	0.8577	1.0269	40N	105W	31	174	02m04s
-1048-Apr-28	21:55:42	26153	719	-37695	31	A	-p	-0.4539	0.9760	13S	29W	63	95	02m33s
-1048-Oct-23	16:37:29	26144	718	-37689	36	A	-n	0.1895	0.9880	1N	42E	79	43	01m11s
-1047-Apr-18	06:50:43	26135	717	-37683	41	T	p-	0.3339	1.0303	24N	176E	70	108	02m36s
-1047-Oct-12	22:22:59	26126	716	-37677	46	A	p-	-0.5310	0.9364	32S	67W	58	274	06m23s
-1046-Mar-09	14:24:11	26119	715	-37672	13	P	-t	-1.4762	0.1040	61S	178W	0		
-1046-Apr-07	21:53:10	26117	715	-37671	51	P	t-	1.0547	0.9161	61N	133W	0		
-1046-Oct-01	22:14:41	26108	714	-37665	56	P	t-	-1.2337	0.5613	61S	135W	0		
-1045-Feb-27	06:23:02	26101	713	-37660	23	T	-p	-0.8031	1.0315	56S	123W	36	177	02m05s
-1045-Aug-22	08:44:39	26092	712	-37654	28	A	-p	0.9750	0.9748	67N	106W	12	425	01m31s
-1044-Feb-16	17:26:33	26083	711	-37648	33	A	nn	-0.0832	0.9805	20S	34E	85	70	02m00s
-1044-Aug-10	20:26:37	26074	710	-37642	38	T	-n	0.2017	1.0447	30N	13W	78	152	03m47s
-1043-Feb-04	21:02:00	26065	709	-37636	43	A	p-	0.6618	0.9313	20N	37W	48	336	08m28s
-1043-Jul-31	12:42:47	26057	708	-37630	48	T	p-	-0.5188	1.0687	9S	90E	59	260	06m11s

-1042-Jan-24	20:31:52	26048	707	-37624	53	P	t-	1.3580	0.3532	63N	54W	0			
-1042-Jun-21	20:04:28	26040	706	-37619	20	P	-t	1.3407	0.3697	67N	164E	0			
-1042-Jul-21	04:55:56	26039	706	-37618	58	P	t-	-1.2619	0.5159	64S	176W	0			
-1042-Dec-15	09:22:18	26032	705	-37613	25	A	-p	-0.8707	0.9842	84S	138E	29	115	01m00s	
-1041-Jun-11	04:25:23	26023	704	-37607	30	A	-p	0.6177	0.9710	60N	145W	52	133	02m30s	
-1041-Dec-04	22:20:54	26014	703	-37601	35	T	-n	-0.1595	1.0380	30S	49W	81	129	03m23s	
-1040-May-30	06:16:53	26005	702	-37595	40	A	nn	-0.1486	0.9495	12N	167W	82	187	06m53s	
-1040-Nov-23	13:59:57	25996	701	-37589	45	T	n-	0.5063	1.0390	11N	81E	60	151	03m45s	
-1039-May-19	07:39:14	25987	700	-37583	50	A	t-	-0.9060	0.9606	47S	174W	25	339	03m54s	
-1039-Nov-13	03:36:21	25979	699	-37577	55	P	t-	1.2168	0.5960	70N	88W	0			
-1038-Apr-09	06:05:51	25971	698	-37572	22	T+	-t	1.0022	1.0036	72N	97E	0			
-1038-Oct-03	17:31:07	25962	697	-37566	27	As	-t	-0.9884	0.9182	71S	43W	8	-	06m07s	
-1037-Mar-29	22:05:14	25954	696	-37560	32	T	-n	0.2466	1.0737	13N	46W	76	246	06m25s	
-1037-Sep-22	16:52:33	25945	695	-37554	37	A	-n	-0.3000	0.9278	12S	29E	72	283	09m21s	
-1036-Mar-18	14:46:27	25936	694	-37548	42	T	p-	-0.4844	1.0523	32S	80E	61	197	04m22s	
-1036-Sep-10	19:22:38	25927	693	-37542	47	A	p-	0.4176	0.9677	32N	5E	65	128	03m20s	
-1035-Feb-06	14:12:38	25920	692	-37537	14	Pe	-t	1.5327	0.0446	69N	51E	0			
-1035-Mar-08	03:28:47	25918	692	-37536	52	P	t-	-1.2697	0.5006	71S	3W	0			
-1035-Aug-01	20:01:01	25911	691	-37531	19	Pe	-t	-1.5078	0.0471	68S	29W	0			
-1035-Aug-31	05:18:20	25910	691	-37530	57	P	t-	1.1066	0.8025	71N	21W	0			
-1034-Jan-26	15:55:26	25902	690	-37525	24	A	-p	0.8682	0.9199	39N	47E	29	613	09m25s	
-1034-Jul-22	12:49:29	25893	689	-37519	29	T	-p	-0.7930	1.0639	30S	94E	37	344	05m32s	
-1033-Jan-15	15:33:32	25885	688	-37513	34	A	nn	0.1639	0.9363	13S	58E	81	240	08m40s	
-1033-Jul-12	04:16:18	25876	687	-37507	39	T	nn	-0.0658	1.0358	20N	137W	86	121	03m36s	
-1032-Jan-04	20:24:06	25867	686	-37501	44	A	p-	-0.5434	0.9799	57S	20W	57	85	01m41s	
-1032-Jun-30	14:02:04	25858	685	-37495	49	A	p-	0.7283	0.9772	70N	61E	43	119	01m44s	
-1032-Nov-24	21:20:49	25851	684	-37490	16	P	-t	1.4955	0.0771	63N	13E	0			
-1032-Dec-24	08:16:40	25849	684	-37489	54	P	t-	-1.1948	0.6404	65S	4E	0			
-1031-May-21	01:58:59	25842	683	-37484	21	P	-t	-1.3292	0.3993	62S	51W	0			
-1031-Jun-19	16:51:42	25841	683	-37483	59	Pb	t-	1.5203	0.0721	64N	120W	0			
-1031-Nov-14	12:53:43	25833	682	-37478	26	T	-p	0.8600	1.0243	38N	117E	30	159	01m57s	
-1030-May-10	04:34:46	25824	681	-37472	31	A	-p	-0.5352	0.9794	15S	129W	58	85	02m14s	
-1030-Nov-04	01:06:51	25816	680	-37466	36	A	-n	0.1938	0.9836	2S	87W	79	59	01m40s	

-1029-Apr-29	14:02:08	25807	679	-37460	41	T	n-	0.2594	1.0358	24N	69E	75	124	03m04s
-1029-Oct-24	06:23:33	25798	678	-37454	46	A	p-	-0.5214	0.9327	36S	172E	58	291	06m41s
-1028-Mar-19	22:16:29	25791	678	-37449	13	Pe	-t	-1.5266	0.0058	61S	54E	0		
-1028-Apr-18	05:26:23	25789	677	-37448	51	Tn	t-	0.9882	1.0590	62N	119E	8	-	03m08s
-1028-Oct-12	05:58:20	25780	676	-37442	56	P	t-	-1.2147	0.5927	61S	99E	0		
-1027-Mar-09	14:13:47	25773	676	-37437	23	T	-t	-0.8515	1.0305	55S	122E	31	194	02m00s
-1027-Sep-01	16:26:54	25764	675	-37431	28	P	-t	1.0108	0.9619	61N	154E	0		
-1026-Feb-27	01:00:35	25755	674	-37425	33	A	nn	-0.1275	0.9803	19S	80W	83	70	01m59s
-1026-Aug-22	04:22:32	25747	673	-37419	38	T	-n	0.2449	1.0439	29N	131W	76	151	03m38s
-1025-Feb-16	04:22:02	25738	672	-37413	43	A	p-	0.6223	0.9335	20N	149W	51	310	07m57s
-1025-Aug-11	20:37:32	25729	671	-37407	48	T	p-	-0.4694	1.0660	8S	31W	62	242	05m49s
-1024-Feb-05	04:00:46	25720	670	-37401	53	P	t-	1.3248	0.4085	62N	177W	0		
-1024-Jul-02	03:13:59	25713	669	-37396	20	P	-t	1.4148	0.2342	66N	45E	0		
-1024-Jul-31	12:32:41	25711	669	-37395	58	P	t-	-1.2100	0.6133	63S	59E	0		
-1024-Dec-25	17:52:49	25704	668	-37390	25	A	-p	-0.8726	0.9887	84S	51E	29	83	00m43s
-1023-Jun-21	11:00:50	25695	667	-37384	30	A	-p	0.7018	0.9658	68N	121E	45	174	02m45s
-1023-Dec-15	07:10:36	25687	666	-37378	35	T	-n	-0.1605	1.0405	32S	179E	81	137	03m34s
-1022-Jun-10	12:34:13	25678	665	-37372	40	A	nn	-0.0592	0.9489	19N	96E	87	188	06m50s
-1022-Dec-04	22:52:21	25669	664	-37366	45	T	n-	0.5072	1.0382	9N	55W	59	149	03m44s
-1021-May-30	14:10:04	25660	663	-37360	50	A	p-	-0.8188	0.9655	35S	80E	35	217	03m49s
-1021-Nov-24	12:15:56	25652	662	-37354	55	P	t-	1.2214	0.5874	69N	128E	0		
-1020-Apr-19	13:27:04	25644	661	-37349	22	P	-t	1.0664	0.8848	71N	28W	0		
-1020-May-18	22:05:22	25643	661	-37348	60	Pb	t-	-1.5291	0.0218	70S	13W	0		
-1020-Oct-14	01:20:49	25635	660	-37343	27	A-	-t	-1.0049	0.9431	72S	161E	0		
-1019-Apr-09	05:43:51	25627	659	-37337	32	T	-n	0.3090	1.0763	21N	164W	72	259	06m26s
-1019-Oct-03	00:32:48	25618	658	-37331	37	A	-n	-0.3219	0.9261	18S	89W	71	292	09m18s
-1018-Mar-29	22:25:10	25609	657	-37325	42	T	n-	-0.4277	1.0531	25S	39W	65	194	04m38s
-1018-Sep-22	03:15:29	25600	656	-37319	47	A	p-	0.3905	0.9679	26N	115W	67	125	03m24s
-1017-Mar-19	10:54:01	25592	655	-37313	52	P	t-	-1.2213	0.5877	72S	130W	0		
-1017-Sep-11	13:25:33	25583	654	-37307	57	P	t-	1.0731	0.8642	71N	158W	0		
-1016-Feb-06	23:21:48	25576	654	-37302	24	A	-p	0.9012	0.9213	45N	71W	25	689	08m37s
-1016-Aug-01	20:35:57	25567	653	-37296	29	T	-p	-0.8484	1.0585	37S	29W	32	364	04m50s
-1015-Jan-25	23:16:28	25558	652	-37290	34	A	nn	0.1873	0.9408	10S	59W	79	223	08m00s

-1015-Jul-22	11:40:15	25549	651	-37284	39	T	nn	-0.1296	1.0298	15N	111E	83	102	03m06s
-1014-Jan-15	04:38:07	25541	650	-37278	44	A	p-	-0.5277	0.9856	55S	139W	58	60	01m13s
-1014-Jul-11	20:53:19	25532	649	-37272	49	A	p-	0.6575	0.9731	65N	31W	49	129	02m11s
-1014-Dec-06	06:13:05	25524	648	-37267	16	P	-t	1.4956	0.0762	63N	130W	0		
-1013-Jan-04	16:54:52	25523	648	-37266	54	P	t-	-1.1840	0.6610	66S	137W	0		
-1013-Jun-01	08:17:37	25516	647	-37261	21	P	-t	-1.4148	0.2525	63S	157W	0		
-1013-Jun-30	23:17:39	25514	647	-37260	59	P	t-	1.4413	0.2081	65N	132E	0		
-1013-Nov-25	21:43:40	25507	646	-37255	26	T	-p	0.8615	1.0222	37N	20W	30	147	01m51s
-1012-May-20	11:14:33	25498	645	-37249	31	A	-p	-0.6166	0.9821	18S	129E	52	79	01m57s
-1012-Nov-14	09:37:43	25489	644	-37243	36	A	-n	0.1959	0.9799	6S	144E	79	73	02m07s
-1011-May-09	21:11:33	25481	643	-37237	41	T	n-	0.1824	1.0406	24N	38W	79	138	03m32s
-1011-Nov-03	14:28:53	25472	642	-37231	46	A	p-	-0.5159	0.9295	40S	49E	59	305	06m56s
-1010-Apr-29	12:53:35	25463	641	-37225	51	T	t-	0.9163	1.0666	62N	31E	23	542	03m47s
-1010-Oct-23	13:50:40	25455	640	-37219	56	P	t-	-1.2023	0.6131	61S	29W	0		
-1009-Mar-20	21:54:11	25447	639	-37214	23	T	-t	-0.9079	1.0286	56S	12E	24	228	01m52s
-1009-Sep-13	00:19:41	25439	638	-37208	28	P	-t	1.0389	0.9121	61N	26E	0		
-1008-Mar-09	08:25:02	25430	637	-37202	33	A	nn	-0.1790	0.9801	17S	169E	80	72	01m59s
-1008-Sep-01	12:27:20	25421	636	-37196	38	T	-n	0.2812	1.0428	27N	108E	74	149	03m30s
-1007-Feb-26	11:32:53	25412	635	-37190	43	A	p-	0.5757	0.9359	19N	101E	55	285	07m26s
-1007-Aug-22	04:38:35	25404	635	-37184	48	T	n-	-0.4253	1.0627	8S	153W	65	225	05m25s
-1006-Feb-15	11:22:32	25395	634	-37178	53	P	t-	1.2852	0.4751	62N	62E	0		
-1006-Jul-13	10:26:04	25388	633	-37173	20	Pe	-t	1.4857	0.1059	65N	74W	0		
-1006-Aug-11	20:15:11	25386	633	-37172	58	P	t-	-1.1633	0.6998	62S	67W	0		
-1005-Jan-06	02:19:16	25379	632	-37167	25	A	-p	-0.8788	0.9935	81S	49W	28	48	00m24s
-1005-Jul-02	17:39:57	25370	631	-37161	30	A	-p	0.7820	0.9602	75N	36E	38	234	03m00s
-1005-Dec-26	15:57:30	25361	630	-37155	35	T	-n	-0.1646	1.0434	33S	48E	80	147	03m46s
-1004-Jun-20	18:55:01	25353	629	-37149	40	Am	nn	0.0274	0.9479	25N	0E	88	192	06m43s
-1004-Dec-15	07:42:27	25344	628	-37143	45	T	n-	0.5064	1.0378	8N	170E	60	147	03m45s
-1003-Jun-09	20:44:19	25335	627	-37137	50	A	p-	-0.7330	0.9694	25S	25W	43	162	03m38s
-1003-Dec-04	20:53:22	25327	626	-37131	55	P	t-	1.2252	0.5805	68N	15W	0		
-1002-Apr-30	20:45:04	25319	625	-37126	22	P	-t	1.1339	0.7584	71N	152W	0		
-1002-May-30	05:07:28	25318	625	-37125	60	P	t-	-1.4486	0.1693	69S	132W	0		
-1002-Oct-25	09:16:22	25311	624	-37120	27	A-	-t	-1.0162	0.9229	71S	26E	0		

-1001-Apr-20	13:17:35	25302	623	-37114	32	T	-n	0.3757	1.0780	29N	79E	68	272	06m20s
-1001-Oct-14	08:20:43	25293	622	-37108	37	A	-n	-0.3378	0.9250	23S	152E	70	299	09m10s
-1000-Apr-09	05:57:05	25284	622	-37102	42	T	n-	-0.3657	1.0533	17S	156W	68	189	04m51s
-1000-Oct-02	11:18:15	25276	622	-37096	47	A	p-	0.3706	0.9684	21N	121E	68	122	03m26s

1ST MILLENNIUM BCE

In the 1st millennium BCE the total number of solar eclipses was 2 373 solar eclipses: 857 partial solar eclipses, 764 annular solar eclipses (743 central annular solar eclipses with two limits, 10 central annular solar eclipses with one limit, 11 non-central annular solar eclipses with one limit), 622 total solar eclipses (609 central total solar eclipses with two limits, 4 central total solar eclipses with one limit, 9 non-central total solar eclipses with one limit), 130 hybrid solar eclipses.

10TH CENTURY BCE

In the 10th century BCE the total number of solar eclipses was 226 solar eclipses: 84 partial solar eclipses, 75 annular solar eclipses (71 central annular solar eclipses with two limits, 3 central annular solar eclipses with one limit, 1 non-central annular solar eclipses with one limit), 61 total solar eclipses (58 central total solar eclipses with two limits, 0 central total solar eclipses with one limit, 3 non-central total solar

eclipses with one limit), 6 hybrid solar eclipses.

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°	°	ALT	WIDTH	DUR.
	GREATEST		S									°	km	
ECLIPSE														
-0999-Mar-29	18:08:26	25267	622	-37090	52	P	t-	-1.1647	0.6893	72S	106E	0		
-0999-Sep-21	21:42:47	25258	621	-37084	57	P	t-	1.0472	0.9121	72N	62E	0		
-0998-Feb-17	06:37:19	25251	621	-37079	24	A	-t	0.9429	0.9224	54N	170E	19	888	07m41s
-0998-Aug-13	04:29:54	25242	621	-37073	29	T	-t	-0.8973	1.0524	45S	154W	26	394	04m04s
-0997-Feb-06	06:50:36	25234	621	-37067	34	A	nn	0.2185	0.9458	6S	175W	77	205	07m12s
-0997-Aug-02	19:10:40	25225	621	-37061	39	T	-n	-0.1872	1.0234	10N	3W	79	81	02m29s
-0996-Jan-26	12:47:01	25216	620	-37055	44	A	p-	-0.5069	0.9917	52S	102E	59	34	00m43s
-0996-Jul-22	03:48:06	25208	620	-37049	49	A	p-	0.5902	0.9685	59N	129W	54	141	02m45s
-0996-Dec-16	15:05:07	25200	620	-37044	16	P	-t	1.4966	0.0737	64N	86E	0		
-0995-Jan-15	01:29:43	25199	620	-37043	54	P	t-	-1.1699	0.6878	67S	82E	0		
-0995-Jun-11	14:37:00	25192	620	-37038	21	Pe	-t	-1.4994	0.1073	64S	98E	0		
-0995-Jul-11	05:46:57	25190	620	-37037	59	P	t-	1.3646	0.3394	66N	23E	0		
-0995-Dec-06	06:33:34	25183	620	-37032	26	T	-p	0.8632	1.0207	36N	158W	30	139	01m47s
-0994-May-31	17:55:14	25174	620	-37026	31	A	-p	-0.6983	0.9841	22S	28E	46	77	01m44s
-0994-Nov-25	18:09:49	25166	619	-37020	36	A	-n	0.1965	0.9767	9S	14E	79	84	02m32s
-0993-May-21	04:22:03	25157	619	-37014	41	T	nn	0.1051	1.0447	23N	145W	84	150	03m58s
-0993-Nov-14	22:35:24	25148	619	-37008	46	A	p-	-0.5118	0.9270	44S	73W	59	317	07m09s
-0992-May-09	20:20:21	25140	619	-37002	51	T	p-	0.8435	1.0712	62N	70W	32	429	04m12s
-0992-Nov-02	21:47:17	25131	619	-36996	56	P	t-	-1.1929	0.6286	61S	158W	0		
-0991-Mar-31	05:26:42	25124	618	-36991	23	T	-t	-0.9703	1.0250	58S	91W	13	356	01m34s
-0991-Sep-23	08:22:05	25115	618	-36985	28	P	-t	1.0602	0.8743	61N	105W	0		
-0990-Mar-20	15:38:45	25106	618	-36979	33	A	-n	-0.2384	0.9795	16S	60E	76	75	02m02s
-0990-Sep-12	20:41:38	25098	618	-36973	38	T	-n	0.3104	1.0418	24N	17W	72	146	03m24s
-0989-Mar-09	18:32:21	25089	618	-36967	43	A	p-	0.5196	0.9383	19N	5W	59	263	06m57s
-0989-Sep-02	12:49:06	25080	618	-36961	48	T	n-	-0.3891	1.0592	9S	83E	67	210	05m00s
-0988-Feb-26	18:35:31	25072	617	-36955	53	P	t-	1.2374	0.5564	61N	56W	0		

-0988-Aug-22	04:04:31	25063	617	-36949	58	P	t-	-1.1226	0.7741	62S	165E	0		
-0987-Jan-16	10:40:25	25056	617	-36944	25	A	-p	-0.8904	0.9986	77S	164W	27	11	00m05s
-0987-Jul-13	00:21:59	25047	617	-36938	30	A	-t	0.8591	0.9539	79N	32W	30	332	03m15s
-0986-Jan-06	00:39:10	25038	617	-36932	35	T	-n	-0.1733	1.0467	34S	81W	80	158	03m59s
-0986-Jul-02	01:19:21	25030	616	-36926	40	A	nn	0.1114	0.9464	30N	96W	83	199	06m35s
-0986-Dec-26	16:29:13	25021	616	-36920	45	T	n-	0.5030	1.0380	6N	36E	60	147	03m46s
-0985-Jun-21	03:22:55	25012	616	-36914	50	A	p-	-0.6496	0.9724	17S	129W	49	130	03m25s
-0985-Dec-16	05:28:25	25004	616	-36908	55	P	t-	1.2278	0.5759	67N	156W	0		
-0984-May-11	04:02:08	24996	616	-36903	22	P	-t	1.2029	0.6280	70N	84E	0		
-0984-Jun-09	12:12:32	24995	616	-36902	60	P	t-	-1.3690	0.3163	68S	109E	0		
-0984-Nov-04	17:16:42	24988	616	-36897	27	A-	-t	-1.0233	0.9101	71S	109W	0		
-0983-Apr-30	20:46:35	24979	615	-36891	32	T	-p	0.4465	1.0790	37N	37W	63	285	06m08s
-0983-Oct-24	16:16:40	24970	615	-36885	37	A	-n	-0.3477	0.9245	28S	31E	69	303	09m01s
-0982-Apr-20	13:22:31	24962	615	-36879	42	T	n-	-0.2986	1.0528	9S	88E	73	183	04m59s
-0982-Oct-13	19:29:26	24953	615	-36873	47	A	p-	0.3567	0.9692	16N	4W	69	118	03m25s
-0981-Apr-10	01:15:36	24944	615	-36867	52	P	t-	-1.1029	0.8001	72S	16W	0		
-0981-Oct-03	06:08:24	24936	614	-36861	57	P	t-	1.0275	0.9484	72N	80W	0		
-0980-Feb-28	13:45:14	24929	614	-36856	24	An	-t	0.9903	0.9221	66N	42E	7	-	06m33s
-0980-Aug-23	12:30:24	24920	614	-36850	29	T	-t	-0.9405	1.0458	53S	76E	19	454	03m18s
-0979-Feb-16	14:18:12	24911	614	-36844	34	A	nn	0.2558	0.9509	1S	71E	75	186	06m21s
-0979-Aug-13	02:47:11	24903	614	-36838	39	H3	-n	-0.2386	1.0168	5N	120W	76	59	01m48s
-0978-Feb-05	20:47:35	24894	614	-36832	44	A	p-	-0.4784	0.9982	47S	17W	61	7	00m09s
-0978-Aug-02	10:49:48	24885	613	-36826	49	A	p-	0.5293	0.9636	53N	127E	58	156	03m24s
-0978-Dec-27	23:52:14	24878	613	-36821	16	P	-t	1.5016	0.0633	65N	58W	0		
-0977-Jan-26	09:56:25	24877	613	-36820	54	P	t-	-1.1494	0.7273	68S	57W	0		
-0977-Jul-22	12:24:04	24868	613	-36814	59	P	t-	1.2936	0.4603	67N	88W	0		
-0977-Dec-17	15:19:27	24861	613	-36809	26	T	-p	0.8678	1.0195	36N	66E	29	134	01m43s
-0976-Jun-11	00:40:04	24852	613	-36803	31	A	-p	-0.7772	0.9854	28S	76W	39	81	01m34s
-0976-Dec-06	02:40:08	24844	613	-36797	36	A	-n	0.1979	0.9743	11S	115W	79	94	02m54s
-0975-May-31	11:31:50	24835	612	-36791	41	T	nn	0.0263	1.0480	22N	108E	88	160	04m22s
-0975-Nov-25	06:43:44	24826	612	-36785	46	A	p-	-0.5098	0.9252	48S	165E	59	326	07m19s
-0974-May-21	03:44:10	24818	612	-36779	51	T	p-	0.7682	1.0744	61N	171W	40	375	04m32s
-0974-Nov-14	05:48:30	24809	612	-36773	56	P	t-	-1.1870	0.6383	62S	71E	0		

-0973-Apr-11	12:50:43	24802	612	-36768	23	P	-t	-1.0388	0.9327	61S	173E	0		
-0973-May-10	20:49:53	24801	612	-36767	61	Pb	t-	1.5116	0.0375	62N	150W	0		
-0973-Oct-04	16:34:36	24793	611	-36762	28	P	-t	1.0739	0.8501	61N	122E	0		
-0972-Mar-30	22:43:45	24785	611	-36756	33	A	-p	-0.3043	0.9787	15S	47W	72	79	02m08s
-0972-Sep-23	05:03:52	24776	611	-36750	38	T	-n	0.3333	1.0406	21N	144W	70	143	03m19s
-0971-Mar-20	01:23:49	24767	611	-36744	43	A	p-	0.4572	0.9408	20N	109W	63	243	06m32s
-0971-Sep-12	21:06:51	24759	611	-36738	48	T	n-	-0.3590	1.0554	11S	44W	69	195	04m36s
-0970-Mar-09	01:40:09	24750	611	-36732	53	P	t-	1.1820	0.6515	61N	173W	0		
-0970-Sep-02	12:01:15	24742	610	-36726	58	P	t-	-1.0886	0.8352	61S	36E	0		
-0969-Jan-27	18:55:43	24734	610	-36721	25	H	-p	-0.9077	1.0037	74S	77E	24	31	00m13s
-0969-Jul-24	07:09:42	24726	610	-36715	30	A	-t	0.9304	0.9470	77N	92W	21	542	03m30s
-0968-Jan-17	09:15:23	24717	610	-36709	35	T	-n	-0.1870	1.0503	33S	151E	79	170	04m12s
-0968-Jul-12	07:50:28	24709	610	-36703	40	A	nn	0.1899	0.9447	34N	167E	79	208	06m28s
-0967-Jan-06	01:10:28	24700	609	-36697	45	T	n-	0.4954	1.0385	6N	97W	60	148	03m47s
-0967-Jul-01	10:06:51	24691	609	-36691	50	A	p-	-0.5694	0.9748	11S	127E	55	110	03m09s
-0967-Dec-26	13:58:24	24683	609	-36685	55	P	t-	1.2269	0.5775	66N	65E	0		
-0966-May-22	11:18:59	24676	609	-36680	22	P	-t	1.2728	0.4949	69N	39W	0		
-0966-Jun-20	19:22:18	24674	609	-36679	60	P	t-	-1.2919	0.4596	67S	10W	0		
-0966-Nov-16	01:18:40	24667	609	-36674	27	P	-t	-1.0287	0.9004	70S	116E	0		
-0965-May-12	04:13:31	24658	609	-36668	32	T	-p	0.5193	1.0789	46N	152W	58	298	05m49s
-0965-Nov-05	00:18:02	24650	608	-36662	37	A	-n	-0.3538	0.9246	33S	91W	69	303	08m48s
-0964-Apr-30	20:42:29	24641	608	-36656	42	T	n-	-0.2275	1.0517	1S	26W	77	176	05m00s
-0964-Oct-24	03:48:07	24633	608	-36650	47	A	n-	0.3482	0.9704	11N	131W	70	113	03m22s
-0963-Apr-20	08:14:03	24624	608	-36644	52	P	t-	-1.0345	0.9222	71S	135W	0		
-0963-Oct-13	14:42:31	24615	608	-36638	57	P	t-	1.0145	0.9724	72N	136E	0		
-0962-Mar-10	20:40:56	24608	607	-36633	24	P	-t	1.0474	0.8765	71N	90W	0		
-0962-Sep-03	20:39:43	24600	607	-36627	29	T	-t	-0.9761	1.0387	62S	61W	12	626	02m33s
-0961-Feb-27	21:37:14	24591	607	-36621	34	A	nn	0.3007	0.9563	5N	42W	72	167	05m29s
-0961-Aug-24	10:30:26	24582	607	-36615	39	H	-n	-0.2835	1.0100	1S	122E	74	36	01m05s
-0960-Feb-17	04:42:09	24574	607	-36609	44	H	p-	-0.4441	1.0050	41S	136W	63	19	00m27s
-0960-Aug-12	17:57:17	24565	607	-36603	49	A	p-	0.4739	0.9584	46N	21E	61	172	04m07s
-0959-Jan-07	08:35:57	24558	606	-36598	16	P	-t	1.5099	0.0464	66N	160E	0		
-0959-Feb-05	18:17:20	24557	606	-36597	54	P	t-	-1.1235	0.7771	69S	164E	0		

-0959-Aug-01	19:06:48	24548	606	-36591	59	P	t-	1.2267	0.5737	68N	159E	0		
-0959-Dec-28	00:02:41	24541	606	-36586	26	T	-p	0.8744	1.0187	37N	70W	29	132	01m39s
-0958-Jun-22	07:29:15	24532	606	-36580	31	A	-p	-0.8534	0.9859	35S	179E	31	95	01m27s
-0958-Dec-17	11:06:59	24524	606	-36574	36	A	-n	0.2012	0.9723	12S	118E	78	101	03m13s
-0957-Jun-11	18:46:02	24515	605	-36568	41	T	nn	-0.0496	1.0506	20N	1W	87	168	04m44s
-0957-Dec-06	14:50:34	24507	605	-36562	46	A	p-	-0.5073	0.9240	51S	45E	59	332	07m27s
-0956-May-31	11:09:02	24498	605	-36556	51	T	p-	0.6934	1.0765	60N	86E	46	343	04m49s
-0956-Nov-24	13:50:55	24490	605	-36550	56	P	t-	-1.1816	0.6472	63S	60W	0		
-0955-Apr-21	20:08:56	24482	605	-36545	23	P	-t	-1.1113	0.7970	61S	54E	0		
-0955-May-21	04:08:47	24481	605	-36544	61	P	t-	1.4429	0.1698	62N	90E	0		
-0955-Oct-15	00:54:52	24474	605	-36539	28	P	-t	1.0825	0.8349	61N	13W	0		
-0954-Apr-11	05:39:00	24465	604	-36533	33	A	-p	-0.3775	0.9774	15S	151W	68	86	02m18s
-0954-Oct-04	13:34:57	24457	604	-36527	38	T	-n	0.3497	1.0398	17N	87E	69	141	03m17s
-0953-Mar-31	08:06:01	24448	604	-36521	43	A	p-	0.3870	0.9430	20N	150E	67	226	06m12s
-0953-Sep-24	05:32:22	24440	604	-36515	48	T	n-	-0.3355	1.0518	14S	172W	70	181	04m14s
-0952-Mar-19	08:37:19	24431	604	-36509	53	P	t-	1.1194	0.7598	61N	73E	0		
-0952-Sep-12	20:05:50	24422	603	-36503	58	P	t-	-1.0615	0.8828	61S	96W	0		
-0951-Feb-07	03:03:15	24415	603	-36498	25	T	-p	-0.9321	1.0088	70S	40W	21	85	00m31s
-0951-Aug-03	14:03:03	24407	603	-36492	30	An	-t	0.9963	0.9375	65N	156W	3	-	03m41s
-0950-Jan-27	17:44:33	24398	603	-36486	35	T	-n	-0.2070	1.0541	32S	24E	78	183	04m25s
-0950-Jul-23	14:28:45	24390	603	-36480	40	A	nn	0.2630	0.9427	37N	69E	75	219	06m24s
-0949-Jan-17	09:44:57	24381	603	-36474	45	T	n-	0.4824	1.0393	6N	132E	61	150	03m49s
-0949-Jul-12	16:58:55	24373	602	-36468	50	A	p-	-0.4945	0.9765	6S	22E	60	96	02m54s
-0948-Jan-06	22:23:42	24364	602	-36462	55	P	t-	1.2227	0.5849	65N	73W	0		
-0948-Jun-01	18:36:25	24357	602	-36457	22	P	-t	1.3428	0.3610	68N	161W	0		
-0948-Jul-01	02:36:21	24355	602	-36456	60	P	t-	-1.2171	0.5992	66S	131W	0		
-0948-Nov-26	09:22:36	24348	602	-36451	27	P	-t	-1.0323	0.8941	69S	18W	0		
-0947-May-22	11:38:24	24340	602	-36445	32	T	-p	0.5939	1.0780	54N	94E	53	314	05m25s
-0947-Nov-15	08:24:01	24331	602	-36439	37	A	-n	-0.3564	0.9253	37S	148E	69	301	08m32s
-0946-May-12	03:57:54	24323	601	-36433	42	T	nn	-0.1533	1.0497	7N	138W	81	167	04m54s
-0946-Nov-04	12:12:50	24314	601	-36427	47	A	n-	0.3439	0.9720	7N	100E	70	107	03m14s
-0945-May-01	15:07:27	24306	601	-36421	52	A	t-	-0.9629	0.9812	59S	83E	15	252	01m30s
-0945-Oct-24	23:21:24	24297	601	-36415	57	P	t-	1.0051	0.9901	71N	9W	0		

-0944-Mar-21	03:30:12	24290	601	-36410	24	P	-t	1.1092	0.7727	72N	152E	0							
-0944-Sep-14	04:56:02	24281	600	-36404	29	P	-t	-1.0055	0.9989	71S	139E	0							
-0943-Mar-10	04:48:29	24273	600	-36398	34	A	-n	0.3528	0.9616	12N	153W	69	148	04m36s					
-0943-Sep-03	18:20:45	24264	600	-36392	39	H	-n	-0.3216	1.0033	7S	1E	71	12	00m21s					
-0942-Feb-27	12:28:15	24256	600	-36386	44	H	p-	-0.4017	1.0118	35S	106E	66	44	01m05s					
-0942-Aug-24	01:13:18	24247	600	-36380	49	A	p-	0.4262	0.9532	40N	89W	65	189	04m54s					
-0941-Jan-18	17:11:34	24240	600	-36375	16	Pe	-t	1.5249	0.0168	67N	19E	0							
-0941-Feb-17	02:28:58	24239	600	-36374	54	P	t-	-1.0899	0.8421	70S	28E	0							
-0941-Aug-13	02:00:14	24230	599	-36368	59	P	t-	1.1680	0.6725	69N	42E	0							
-0940-Jan-08	08:39:26	24223	599	-36363	26	T	-p	0.8858	1.0181	39N	155E	27	134	01m36s					
-0940-Jul-02	14:24:04	24215	599	-36357	31	A	-p	-0.9256	0.9853	44S	71E	22	138	01m24s					
-0940-Dec-27	19:29:06	24206	599	-36351	36	A	-n	0.2078	0.9709	12S	9W	78	107	03m29s					
-0939-Jun-22	02:02:46	24198	599	-36345	41	Tm	nn	-0.1238	1.0523	17N	110W	83	175	05m02s					
-0939-Dec-16	22:54:30	24189	598	-36339	46	A	p-	-0.5025	0.9237	53S	72W	60	333	07m33s					
-0938-Jun-11	18:33:52	24181	598	-36333	51	T	p-	0.6184	1.0773	59N	17W	52	318	05m04s					
-0938-Dec-05	21:54:35	24172	598	-36327	56	P	t-	-1.1769	0.6552	63S	169E	0							
-0937-May-03	03:20:59	24165	598	-36322	23	P	-t	-1.1880	0.6536	61S	64W	0							
-0937-Jun-01	11:25:49	24164	598	-36321	61	P	t-	1.3730	0.3040	63N	30W	0							
-0937-Oct-26	09:21:52	24156	598	-36316	28	P	-t	1.0866	0.8280	61N	150W	0							
-0936-Apr-21	12:27:40	24148	598	-36310	33	A	-p	-0.4552	0.9757	16S	106E	63	96	02m32s					
-0936-Oct-14	22:13:02	24139	597	-36304	38	T	-n	0.3607	1.0391	13N	45W	69	139	03m17s					
-0935-Apr-10	14:40:08	24131	597	-36298	43	A	pn	0.3103	0.9451	20N	52E	72	211	05m58s					
-0935-Oct-04	14:05:01	24122	597	-36292	48	T	n-	-0.3182	1.0481	17S	58E	71	168	03m54s					
-0934-Mar-30	15:28:04	24114	597	-36286	53	P	t-	1.0508	0.8796	61N	40W	0							
-0934-Sep-24	04:17:18	24105	597	-36280	58	P	t-	-1.0407	0.9184	61S	131E	0							
-0933-Feb-18	11:03:59	24098	596	-36275	25	T	-p	-0.9630	1.0133	67S	154W	15	173	00m45s					
-0933-Aug-14	21:04:38	24090	596	-36269	30	P	-t	1.0548	0.8682	62N	92E	0							
-0932-Feb-08	02:07:12	24081	596	-36263	35	T	-n	-0.2328	1.0579	31S	101W	76	196	04m38s					
-0932-Aug-02	21:14:46	24073	596	-36257	40	A	np	0.3299	0.9405	39N	30W	71	233	06m22s					
-0931-Jan-27	18:12:18	24064	596	-36251	45	T	n-	0.4637	1.0404	6N	3E	62	152	03m50s					
-0931-Jul-22	23:59:04	24056	596	-36245	50	A	p-	-0.4250	0.9778	2S	85W	65	87	02m40s					
-0930-Jan-17	06:39:27	24047	595	-36239	55	P	t-	1.2116	0.6047	64N	152E	0							
-0930-Jun-13	01:56:23	24040	595	-36234	22	P	-t	1.4112	0.2296	67N	76E	0							

-0930-Jul-12	09:57:47	24039	595	-36233	60	P	t-	-1.1472	0.7300	65S	107E	0		
-0930-Dec-07	17:24:32	24032	595	-36228	27	P	-t	-1.0374	0.8856	68S	152W	0		
-0929-Jun-02	19:03:28	24023	595	-36222	32	T	-p	0.6681	1.0760	62N	17W	48	332	04m58s
-0929-Nov-26	16:30:49	24015	595	-36216	37	A	-n	-0.3589	0.9268	40S	26E	69	295	08m12s
-0928-May-22	11:10:20	24006	594	-36210	42	Tm	nn	-0.0772	1.0470	14N	111E	86	157	04m39s
-0928-Nov-14	20:41:51	23998	594	-36204	47	A	n-	0.3423	0.9742	3N	29W	70	98	03m01s
-0927-May-11	21:53:11	23989	594	-36198	52	A	p-	-0.8856	0.9820	46S	34W	27	137	01m41s
-0927-Nov-04	08:06:49	23981	594	-36192	57	P	t-	1.0006	0.9988	71N	155W	0		
-0926-Apr-01	10:09:27	23974	594	-36187	24	P	-t	1.1790	0.6548	72N	37E	0		
-0926-Sep-25	13:20:29	23965	594	-36181	29	P	-t	-1.0282	0.9541	72S	3W	0		
-0925-Mar-21	11:52:33	23957	593	-36175	34	A	-p	0.4117	0.9668	20N	97E	66	130	03m47s
-0925-Sep-15	02:19:03	23948	593	-36169	39	A	-n	-0.3524	0.9968	13S	121W	69	12	00m21s
-0924-Mar-09	20:08:47	23940	593	-36163	44	T	p-	-0.3538	1.0187	28S	12W	69	68	01m45s
-0924-Sep-03	08:35:45	23931	593	-36157	49	A	p-	0.3845	0.9480	33N	158E	67	206	05m44s
-0923-Feb-27	10:34:44	23923	593	-36151	54	P	t-	-1.0512	0.9175	71S	108W	0		
-0923-Aug-23	09:01:37	23914	592	-36145	59	P	t-	1.1155	0.7602	70N	77W	0		
-0922-Jan-18	17:09:34	23907	592	-36140	26	T	-t	0.9022	1.0176	42N	22E	25	141	01m31s
-0922-Jul-13	21:26:28	23899	592	-36134	31	As	-t	-0.9924	0.9822	61S	41W	6	-	01m27s
-0921-Jan-08	03:45:00	23890	592	-36128	36	A	-n	0.2183	0.9699	11S	134W	77	111	03m40s
-0921-Jul-03	09:25:40	23882	592	-36122	41	T	nn	-0.1938	1.0534	13N	138E	79	180	05m15s
-0921-Dec-28	06:53:05	23873	592	-36116	46	A	p-	-0.4939	0.9238	53S	172E	60	331	07m38s
-0920-Jun-22	02:02:22	23865	591	-36110	51	T	p-	0.5466	1.0772	56N	122W	57	299	05m17s
-0920-Dec-16	05:55:41	23857	591	-36104	56	P	t-	-1.1697	0.6674	64S	38E	0		
-0919-May-13	10:28:09	23850	591	-36099	23	P	-t	-1.2675	0.5055	62S	179E	0		
-0919-Jun-11	18:42:25	23848	591	-36098	61	P	t-	1.3033	0.4373	64N	150W	0		
-0919-Nov-05	17:54:25	23841	591	-36093	28	P	-t	1.0870	0.8279	61N	72E	0		
-0918-May-02	19:09:30	23833	591	-36087	33	A	-p	-0.5372	0.9733	17S	5E	57	111	02m52s
-0918-Oct-26	06:56:43	23824	591	-36081	38	T	-n	0.3673	1.0389	10N	178W	68	139	03m21s
-0917-Apr-21	21:08:08	23816	590	-36075	43	A	nn	0.2288	0.9468	20N	45W	77	200	05m50s
-0917-Oct-15	22:44:42	23807	590	-36069	48	T	n-	-0.3074	1.0447	21S	73W	72	156	03m36s
-0916-Apr-09	22:12:46	23799	590	-36063	53	A	t-	0.9762	0.9512	60N	127W	12	845	03m26s
-0916-Oct-04	12:35:50	23790	590	-36057	58	P	t-	-1.0265	0.9418	61S	3W	0		
-0915-Feb-28	18:56:51	23783	590	-36052	25	T-	-t	-1.0010	1.0008	61S	110E	0		

-0915-Aug-25	04:14:11	23775	589	-36046	30	P	-t	1.1060	0.7794	62N	26W	0	
-0914-Feb-18	10:20:32	23766	589	-36040	35	T	-n	-0.2667	1.0617	29S	136E	74	210 04m51s
-0914-Aug-14	04:10:44	23758	589	-36034	40	A	-p	0.3889	0.9382	39N	132W	67	248 06m25s
-0913-Feb-08	02:31:24	23750	589	-36028	45	T	n-	0.4385	1.0416	6N	124W	64	154 03m51s
-0913-Aug-03	07:07:54	23741	589	-36022	50	A	p-	-0.3617	0.9786	0N	166E	69	81 02m29s
-0912-Jan-28	14:48:03	23733	589	-36016	55	P	t-	1.1955	0.6333	63N	19E	0	
-0912-Jun-23	09:19:25	23726	588	-36011	22	Pe	-t	1.4775	0.1019	66N	47W	0	
-0912-Jul-22	17:25:40	23724	588	-36010	60	P	t-	-1.0816	0.8528	64S	16W	0	
-0912-Dec-18	01:24:44	23717	588	-36005	27	P	-t	-1.0433	0.8760	67S	76E	0	
-0911-Jun-13	02:27:51	23709	588	-35999	32	T	-p	0.7426	1.0730	71N	126W	42	356 04m29s
-0911-Dec-07	00:39:03	23700	588	-35993	37	A	-n	-0.3607	0.9289	43S	94W	69	286 07m48s
-0910-Jun-02	18:21:12	23692	588	-35987	42	T	nn	-0.0006	1.0435	21N	1E	90	145 04m16s
-0910-Nov-26	05:12:28	23684	587	-35981	47	A	n-	0.3412	0.9770	0N	159W	70	87 02m43s
-0909-May-23	04:37:14	23675	587	-35975	52	A	p-	-0.8076	0.9811	35S	143W	36	114 01m59s
-0909-Nov-15	16:54:51	23667	587	-35969	57	T+	t-	0.9977	1.0048	70N	59E	0	
-0908-Apr-11	16:43:26	23660	587	-35964	24	P	-t	1.2526	0.5299	72N	77W	0	
-0908-Oct-05	21:50:49	23651	587	-35958	29	P	-t	-1.0456	0.9196	72S	146W	0	
-0907-Mar-31	18:50:48	23643	587	-35952	34	A	-p	0.4761	0.9718	28N	12W	61	114 03m01s
-0907-Sep-25	10:24:19	23634	586	-35946	39	A	-p	-0.3763	0.9905	18S	114E	68	36 00m59s
-0906-Mar-21	03:40:57	23626	586	-35940	44	T	n-	-0.2982	1.0254	20S	128W	73	90 02m26s
-0906-Sep-14	16:07:32	23618	586	-35934	49	A	n-	0.3513	0.9431	27N	43E	69	224 06m33s
-0905-Mar-10	18:31:53	23609	586	-35928	54	T-	t-	-1.0054	1.0070	71S	118E	0	
-0905-Sep-03	16:13:01	23601	586	-35922	59	P	t-	1.0709	0.8343	71N	161E	0	
-0904-Jan-30	01:31:01	23594	585	-35917	26	T	-t	0.9252	1.0169	47N	110W	22	154 01m24s
-0904-Jul-24	04:37:05	23585	585	-35911	31	P	-t	-1.0529	0.8905	68S	160W	0	
-0903-Jan-18	11:52:18	23577	585	-35905	36	A	-n	0.2354	0.9694	9S	103E	76	113 03m46s
-0903-Jul-13	16:53:13	23568	585	-35899	41	T	-n	-0.2603	1.0537	8N	25E	75	184 05m21s
-0902-Jan-07	14:45:47	23560	585	-35893	46	A	p-	-0.4809	0.9247	52S	58E	61	324 07m41s
-0902-Jul-03	09:33:52	23552	585	-35887	51	T	p-	0.4773	1.0761	52N	130E	61	281 05m26s
-0902-Dec-27	13:53:45	23543	584	-35881	56	P	t-	-1.1596	0.6847	65S	93W	0	
-0901-May-24	17:32:20	23536	584	-35876	23	P	-t	-1.3482	0.3560	63S	62E	0	
-0901-Jun-23	02:00:27	23535	584	-35875	61	P	t-	1.2353	0.5663	65N	89E	0	
-0901-Nov-17	02:31:29	23528	584	-35870	28	P	-t	1.0842	0.8336	62N	68W	0	

-0900-May-13	01:46:08	23519	584	-35864	33	A	-p	-0.6225	0.9703	20S	95W	51	133	03m16s
-0900-Nov-05	15:45:34	23511	584	-35858	38	T	-n	0.3700	1.0389	6N	48E	68	140	03m26s

9TH CENTURY BCE

In the 9th century BCE the total number of solar eclipses was 225 solar eclipses: 80 partial solar eclipses, 75 annular solar eclipses (72 central annular solar eclipses with two limits, 1 central annular solar eclipses with one limit, 2 non-central annular solar eclipses with one limit), 66 total solar eclipses (62 central total solar eclipses with two limits, 2 central total solar eclipses with one limit, 2 non-central total solar eclipses with one limit), 4 hybrid solar eclipses.

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°.	°	ALT	WIDTH	DUR.
GREATEST			S									°	km	
ECLIPSE														

-0899-May-02	03:31:10	23503	583	-35852	43	A	nn	0.1432	0.9483	20N	140W	82	192	05m49s
-0899-Oct-26	07:29:25	23494	583	-35846	48	T	n-	-0.3006	1.0416	25S	154E	72	145	03m21s
-0898-Apr-21	04:53:02	23486	583	-35840	53	A	t-	0.8966	0.9591	58N	151E	26	331	03m04s
-0898-Oct-15	20:59:57	23477	583	-35834	58	P	p-	-1.0174	0.9559	61S	139W	0		
-0897-Mar-12	02:43:52	23470	583	-35829	25	P	-t	-1.0449	0.9217	61S	17W	0		
-0897-Sep-05	11:31:03	23462	583	-35823	30	P	-t	1.1507	0.7025	61N	145W	0		
-0896-Feb-29	18:27:14	23454	582	-35817	35	T	-n	-0.3066	1.0652	27S	14E	72	223	05m04s
-0896-Aug-24	11:15:52	23445	582	-35811	40	A	-p	0.4409	0.9360	38N	123E	64	263	06m32s
-0895-Feb-18	10:40:45	23437	582	-35805	45	T	n-	0.4057	1.0428	7N	112E	66	155	03m51s
-0895-Aug-13	14:26:40	23429	582	-35799	50	A	p-	-0.3056	0.9792	1N	55E	72	77	02m19s
-0894-Feb-07	22:45:35	23420	582	-35793	55	P	t-	1.1712	0.6766	62N	111W	0		

-0894-Aug-03	01:02:56	23412	581	-35787	60	P	t-	-1.0229	0.9626	63S	141W	0		
-0894-Dec-29	09:18:19	23405	581	-35782	27	P	-t	-1.0546	0.8577	66S	54W	0		
-0893-Jun-24	09:55:47	23396	581	-35776	32	T	-p	0.8140	1.0689	78N	135E	35	390	03m59s
-0893-Dec-18	08:45:18	23388	581	-35770	37	A	-n	-0.3650	0.9318	45S	146E	68	275	07m20s
-0892-Jun-13	01:30:41	23380	581	-35764	42	T	nn	0.0764	1.0392	27N	107W	85	132	03m47s
-0892-Dec-06	13:44:30	23371	581	-35758	47	A	n-	0.3404	0.9805	2S	71E	70	74	02m18s
-0891-Jun-02	11:17:16	23363	580	-35752	52	A	p-	-0.7267	0.9792	26S	111E	43	108	02m22s
-0891-Nov-26	01:45:19	23355	580	-35746	57	Tn	t-	0.9967	1.0144	67N	89W	2	-	00m58s
-0890-Apr-22	23:10:00	23348	580	-35741	24	P	-t	1.3318	0.3946	71N	172E	0		
-0890-May-22	14:06:33	23346	580	-35740	62	Pb	t-	-1.5230	0.0666	69S	93E	0		
-0890-Oct-17	06:28:19	23339	580	-35735	29	P	-t	-1.0570	0.8968	72S	69E	0		
-0889-Apr-12	01:44:22	23331	580	-35729	34	A	-p	0.5450	0.9765	36N	120W	57	99	02m21s
-0889-Oct-06	18:35:34	23322	580	-35723	39	A	-p	-0.3943	0.9846	24S	11W	67	59	01m34s
-0888-Mar-31	11:09:01	23314	579	-35717	44	T	n-	-0.2382	1.0318	13S	116E	76	110	03m06s
-0888-Sep-24	23:46:16	23306	579	-35711	49	A	n-	0.3244	0.9383	21N	74W	71	241	07m23s
-0887-Mar-21	02:22:06	23297	579	-35705	54	T	t-	-0.9535	1.0558	68S	64W	17	624	03m18s
-0887-Sep-13	23:33:46	23289	579	-35699	59	P	t-	1.0334	0.8961	72N	35E	0		
-0886-Feb-09	09:44:19	23282	579	-35694	26	T	-t	0.9545	1.0158	54N	118E	17	185	01m13s
-0886-Aug-04	11:57:15	23274	578	-35688	31	P	-t	-1.1066	0.7941	69S	77E	0		
-0885-Jan-29	19:50:31	23265	578	-35682	36	A	-n	0.2592	0.9691	5S	18W	75	115	03m50s
-0885-Jul-25	00:29:27	23257	578	-35676	41	T	-n	-0.3202	1.0535	3N	91W	71	187	05m20s
-0884-Jan-18	22:30:59	23249	578	-35670	46	A	p-	-0.4621	0.9261	50S	55W	62	314	07m44s
-0884-Jul-13	17:09:53	23240	578	-35664	51	T	p-	0.4119	1.0743	48N	19E	65	265	05m33s
-0883-Jan-06	21:46:31	23232	578	-35658	56	P	t-	-1.1448	0.7101	66S	137E	0		
-0883-Jun-04	00:34:30	23225	577	-35653	23	P	-t	-1.4291	0.2074	63S	54W	0		
-0883-Jul-03	09:20:52	23224	577	-35652	61	P	t-	1.1701	0.6890	66N	32W	0		
-0883-Nov-27	11:09:35	23217	577	-35647	28	P	-t	1.0815	0.8393	63N	152E	0		
-0882-May-24	08:19:07	23208	577	-35641	33	A	-p	-0.7097	0.9666	24S	166E	45	167	03m44s
-0882-Nov-17	00:37:01	23200	577	-35635	38	T	-n	0.3707	1.0396	3N	87W	68	142	03m35s
-0881-May-13	09:50:52	23192	577	-35629	43	A	nn	0.0547	0.9492	19N	126E	87	187	05m54s
-0881-Nov-06	16:17:19	23183	576	-35623	48	T	n-	-0.2970	1.0389	29S	21E	73	136	03m08s
-0880-May-01	11:30:13	23175	576	-35617	53	A	p-	0.8135	0.9653	57N	62E	35	212	02m42s
-0880-Oct-26	05:29:25	23167	576	-35611	58	P	p-	-1.0135	0.9608	61S	83E	0		

-0879-Mar-22	10:22:07	23160	576	-35606	25	P	-t	-1.0965	0.8271	61S	141W	0							
-0879-Apr-20	19:29:11	23158	576	-35605	63	Pb	t-	1.5194	0.0411	61N	121W	0							
-0879-Sep-15	18:57:06	23151	576	-35600	30	P	-t	1.1872	0.6402	61N	93E	0							
-0878-Mar-12	02:24:51	23143	576	-35594	35	T	-n	-0.3541	1.0685	25S	105W	69	237	05m16s					
-0878-Sep-04	18:31:39	23135	575	-35588	40	A	-p	0.4843	0.9338	36N	15E	61	279	06m42s					
-0877-Mar-01	18:41:21	23126	575	-35582	45	T	n-	0.3662	1.0439	8N	9W	68	156	03m52s					
-0877-Aug-24	21:56:05	23118	575	-35576	50	A	n-	-0.2575	0.9795	1N	58W	75	75	02m12s					
-0876-Feb-19	06:34:39	23110	575	-35570	55	P	t-	1.1410	0.7305	62N	121E	0							
-0876-Aug-13	08:47:12	23101	575	-35564	60	T	t-	-0.9693	1.0250	52S	109E	14	350	01m50s					
-0875-Jan-08	17:07:48	23094	574	-35559	27	P	-t	-1.0689	0.8348	65S	177E	0							
-0875-Jul-04	17:25:54	23086	574	-35553	32	T	-t	0.8835	1.0638	83N	70E	28	452	03m28s					
-0875-Dec-28	16:48:23	23078	574	-35547	37	A	-n	-0.3724	0.9352	46S	28E	68	260	06m49s					
-0874-Jun-24	08:41:43	23069	574	-35541	42	T	nn	0.1511	1.0343	32N	145E	81	117	03m13s					
-0874-Dec-17	22:14:58	23061	574	-35535	47	A	n-	0.3374	0.9845	4S	58W	70	58	01m49s					
-0873-Jun-13	17:57:53	23053	574	-35529	52	A	p-	-0.6471	0.9766	18S	6E	50	109	02m51s					
-0873-Dec-07	10:34:34	23044	573	-35523	57	Tn	t-	0.9944	1.0174	64N	125E	4	-	01m13s					
-0872-May-03	05:34:24	23038	573	-35518	24	P	-t	1.4123	0.2563	71N	61E	0							
-0872-Jun-01	20:25:23	23036	573	-35517	62	P	t-	-1.4383	0.2121	68S	15W	0							
-0872-Oct-27	15:09:48	23029	573	-35512	29	P	-t	-1.0646	0.8812	71S	76W	0							
-0871-Apr-22	08:32:59	23021	573	-35506	34	A	-p	0.6188	0.9806	45N	133E	52	87	01m47s					
-0871-Oct-17	02:52:48	23013	573	-35500	39	A	-p	-0.4064	0.9793	29S	138W	66	80	02m05s					
-0870-Apr-11	18:31:08	23004	572	-35494	44	T	n-	-0.1723	1.0377	5S	2E	80	128	03m42s					
-0870-Oct-06	07:32:42	22996	572	-35488	49	A	n-	0.3045	0.9341	15N	167E	72	257	08m11s					
-0869-Apr-01	10:05:25	22988	572	-35482	54	T	t-	-0.8956	1.0623	58S	158E	26	459	04m04s					
-0869-Sep-25	07:05:11	22979	572	-35476	59	A+	t-	1.0041	0.9439	72N	93W	0							
-0868-Feb-20	17:47:40	22972	572	-35471	26	T	-t	0.9912	1.0129	66N	21W	6	403	00m53s					
-0868-Aug-14	19:26:30	22964	572	-35465	31	P	-t	-1.1536	0.7097	70S	49W	0							
-0867-Feb-09	03:38:55	22956	571	-35459	36	A	-n	0.2901	0.9690	1S	137W	73	116	03m49s					
-0867-Aug-04	08:12:42	22948	571	-35453	41	T	-n	-0.3745	1.0526	2S	150E	68	188	05m11s					
-0866-Jan-29	06:06:34	22939	571	-35447	46	A	p-	-0.4359	0.9280	46S	167W	64	301	07m46s					
-0866-Jul-25	00:51:30	22931	571	-35441	51	T	n-	0.3516	1.0716	43N	95W	69	249	05m35s					
-0865-Jan-18	05:34:02	22923	571	-35435	56	P	t-	-1.1256	0.7432	68S	8E	0							
-0865-Jun-15	07:35:45	22916	571	-35430	23	Pe	-t	-1.5095	0.0610	64S	170W	0							

-0865-Jul-14	16:43:58	22914	570	-35429	61	P	t-	1.1077	0.8051	67N	155W	0			
-0865-Dec-08	19:48:28	22908	570	-35424	28	P	-t	1.0787	0.8453	64N	12E	0			
-0864-Jun-03	14:50:06	22899	570	-35418	33	A	-p	-0.7972	0.9623	30S	66E	37	223	04m13s	
-0864-Nov-27	09:30:12	22891	570	-35412	38	T	-n	0.3704	1.0406	1N	138E	68	146	03m46s	
-0863-May-23	16:07:55	22883	570	-35406	43	Am	nn	-0.0360	0.9498	17N	32E	88	184	06m05s	
-0863-Nov-17	01:08:01	22874	570	-35400	48	T	n-	-0.2961	1.0367	33S	112W	73	129	02m58s	
-0862-May-12	18:06:45	22866	569	-35394	53	A	p-	0.7287	0.9706	56N	30W	43	152	02m21s	
-0862-Nov-06	14:01:01	22858	569	-35388	58	P	p-	-1.0121	0.9612	62S	55W	0			
-0861-Apr-02	17:56:17	22851	569	-35383	25	P	-t	-1.1521	0.7239	61S	95E	0			
-0861-May-02	02:38:01	22849	569	-35382	63	P	t-	1.4435	0.1795	61N	121E	0			
-0861-Sep-27	02:31:07	22843	569	-35377	30	P	-t	1.2165	0.5905	61N	30W	0			
-0860-Mar-22	10:16:01	22834	569	-35371	35	T	-n	-0.4072	1.0712	24S	136E	66	251	05m28s	
-0860-Sep-15	01:56:51	22826	569	-35365	40	A	-p	0.5203	0.9319	34N	97W	58	293	06m55s	
-0859-Mar-12	02:32:37	22818	568	-35359	45	T	n-	0.3194	1.0447	10N	128W	71	156	03m52s	
-0859-Sep-04	05:36:20	22810	568	-35353	50	A	n-	-0.2172	0.9797	0S	175W	77	74	02m07s	
-0858-Mar-01	14:11:08	22801	568	-35347	55	P	t-	1.1011	0.8014	61N	3W	0			
-0858-Aug-24	16:42:24	22793	568	-35341	60	T	t-	-0.9240	1.0271	46S	9W	22	237	02m03s	
-0857-Jan-20	00:48:26	22786	568	-35336	27	P	-t	-1.0905	0.7996	64S	51E	0			
-0857-Jul-16	01:00:49	22778	567	-35330	32	T	-t	0.9486	1.0572	78N	14E	18	614	02m55s	
-0856-Jan-09	00:46:16	22769	567	-35324	37	A	-n	-0.3848	0.9392	46S	88W	67	244	06m14s	
-0856-Jul-04	15:54:24	22761	567	-35318	42	T	-n	0.2238	1.0287	37N	37E	77	100	02m37s	
-0856-Dec-28	06:42:37	22753	567	-35312	47	A	n-	0.3314	0.9892	5S	174E	71	40	01m15s	
-0855-Jun-24	00:37:31	22745	567	-35306	52	A	p-	-0.5673	0.9733	11S	97W	55	116	03m23s	
-0855-Dec-17	19:23:14	22737	567	-35300	57	T	t-	0.9914	1.0208	61N	17W	6	646	01m30s	
-0854-May-14	11:55:11	22730	566	-35295	24	Pe	-t	1.4955	0.1131	70N	48W	0			
-0854-Jun-13	02:44:23	22728	566	-35294	62	P	t-	-1.3533	0.3580	67S	122W	0			
-0854-Nov-07	23:55:05	22721	566	-35289	29	P	-t	-1.0689	0.8720	70S	138E	0			
-0853-May-03	15:20:04	22713	566	-35283	34	A	-p	0.6945	0.9842	55N	26E	46	78	01m20s	
-0853-Oct-28	11:15:17	22705	566	-35277	39	A	-p	-0.4136	0.9745	34S	95E	65	100	02m32s	
-0852-Apr-22	01:49:48	22697	566	-35271	44	T	nn	-0.1026	1.0432	3N	112W	84	145	04m14s	
-0852-Oct-16	15:25:26	22688	565	-35265	49	A	n-	0.2903	0.9302	10N	46E	73	272	08m58s	
-0851-Apr-11	17:43:12	22680	565	-35259	54	T	p-	-0.8328	1.0677	48S	32E	33	396	04m50s	
-0851-Oct-05	14:44:53	22672	565	-35253	59	An	t-	0.9815	0.9125	69N	108E	10	-	06m55s	

-0850-Mar-03	01:41:28	22665	565	-35248	26	P	-t	1.0351	0.9351	71N	165W	0		
-0850-Aug-26	03:06:28	22657	565	-35242	31	P	-t	-1.1925	0.6397	70S	177W	0		
-0849-Feb-20	11:17:29	22648	565	-35236	36	A	-p	0.3279	0.9689	5N	105E	71	118	03m46s
-0849-Aug-15	16:03:58	22640	564	-35230	41	T	-n	-0.4224	1.0515	7S	29E	65	188	04m58s
-0848-Feb-09	13:33:05	22632	564	-35224	46	A	p-	-0.4027	0.9301	41S	81E	66	286	07m48s
-0848-Aug-04	08:39:26	22624	564	-35218	51	T	n-	0.2969	1.0684	37N	148E	73	234	05m33s
-0847-Jan-28	13:12:42	22616	564	-35212	56	P	t-	-1.0984	0.7900	69S	119W	0		
-0847-Jul-25	00:11:55	22607	564	-35206	61	P	t-	1.0499	0.9112	68N	81E	0		
-0847-Dec-19	04:24:57	22600	563	-35201	28	P	-t	1.0786	0.8469	65N	128W	0		
-0846-Jun-14	21:21:17	22592	563	-35195	33	A	-t	-0.8835	0.9570	38S	34W	28	332	04m38s
-0846-Dec-08	18:21:43	22584	563	-35189	38	T	-n	0.3717	1.0423	1S	3E	68	152	04m01s
-0845-Jun-03	22:25:53	22576	563	-35183	43	A	nn	-0.1259	0.9498	14N	62W	83	186	06m22s
-0845-Nov-28	09:59:38	22567	563	-35177	48	T	n-	-0.2965	1.0350	36S	115E	73	123	02m51s
-0844-May-23	00:41:47	22559	563	-35171	53	A	p-	0.6415	0.9753	55N	122W	50	114	02m03s
-0844-Nov-16	22:35:49	22551	562	-35165	58	P	p-	-1.0141	0.9558	62S	167E	0		
-0843-Apr-13	01:23:51	22544	562	-35160	25	P	-t	-1.2134	0.6085	61S	27W	0		
-0843-May-12	09:43:36	22543	562	-35159	63	P	t-	1.3640	0.3260	62N	5E	0		
-0843-Oct-07	10:13:34	22536	562	-35154	30	P	-t	1.2388	0.5531	61N	156W	0		
-0842-Apr-02	17:59:04	22528	562	-35148	35	T	-p	-0.4672	1.0733	23S	20E	62	266	05m39s
-0842-Sep-26	09:32:56	22520	562	-35142	40	A	-p	0.5479	0.9304	31N	148E	57	306	07m11s
-0841-Mar-23	10:15:59	22511	561	-35136	45	T	n-	0.2664	1.0452	11N	115E	74	156	03m52s
-0841-Sep-15	13:25:50	22503	561	-35130	50	A	n-	-0.1837	0.9799	3S	67E	79	73	02m02s
-0840-Mar-11	21:39:23	22495	561	-35124	55	P	t-	1.0554	0.8827	61N	125W	0		
-0840-Sep-04	00:45:36	22487	561	-35118	60	T	t-	-0.8846	1.0280	44S	131W	27	199	02m06s
-0839-Jan-30	08:21:23	22480	561	-35113	27	P	-t	-1.1179	0.7548	63S	73W	0		
-0839-Jul-26	08:40:19	22472	561	-35107	32	T+	-t	1.0094	1.0005	64N	73W	0		
-0838-Jan-19	08:38:37	22463	560	-35101	37	A	-n	-0.4023	0.9437	45S	156E	66	227	05m38s
-0838-Jul-15	23:11:27	22455	560	-35095	42	T	-n	0.2917	1.0227	40N	70W	73	81	02m01s
-0837-Jan-08	15:05:21	22447	560	-35089	47	A	n-	0.3205	0.9943	5S	46E	71	21	00m38s
-0837-Jul-05	07:21:19	22439	560	-35083	52	A	p-	-0.4917	0.9695	6S	159E	61	126	03m55s
-0837-Dec-29	04:08:03	22431	560	-35077	57	T	t-	0.9849	1.0249	57N	157W	9	533	01m50s
-0836-Jun-23	09:05:39	22422	559	-35071	62	P	t-	-1.2695	0.5014	66S	130E	0		
-0836-Nov-18	08:42:09	22415	559	-35066	29	P	-t	-1.0715	0.8664	69S	8W	0		

-0835-May-13	22:05:36	22407	559	-35060	34	A	-p	0.7726	0.9870	65N	82W	39	72	00m59s
-0835-Nov-07	19:40:24	22399	559	-35054	39	A	-p	-0.4177	0.9703	38S	32W	65	117	02m54s
-0834-May-03	09:05:03	22391	559	-35048	44	T	nn	-0.0292	1.0480	11N	136E	88	159	04m39s
-0834-Oct-27	23:23:48	22383	559	-35042	49	A	n-	0.2811	0.9270	5N	76W	74	285	09m41s
-0833-Apr-23	01:16:02	22375	558	-35036	54	T	p-	-0.7658	1.0720	39S	90W	40	361	05m33s
-0833-Oct-16	22:32:25	22366	558	-35030	59	A	t-	0.9647	0.9123	63N	28W	15	1302	07m34s
-0832-Mar-13	09:25:34	22359	558	-35025	26	P	-t	1.0861	0.8406	72N	64E	0		
-0832-Apr-11	18:10:06	22358	558	-35024	64	Pb	t-	-1.5029	0.0556	71S	76E	0		
-0832-Sep-05	10:56:23	22351	558	-35019	31	P	-t	-1.2240	0.5829	71S	51E	0		
-0831-Mar-02	18:43:49	22343	558	-35013	36	A	-p	0.3751	0.9688	11N	10W	68	121	03m41s
-0831-Aug-26	00:04:06	22335	558	-35007	41	T	-n	-0.4634	1.0499	13S	94W	62	186	04m40s
-0830-Feb-19	20:49:26	22327	557	-35001	46	A	p-	-0.3614	0.9327	35S	29W	69	269	07m48s
-0830-Aug-15	16:34:34	22319	557	-34995	51	T	n-	0.2486	1.0646	31N	28E	75	218	05m25s
-0829-Feb-08	20:44:34	22310	557	-34989	56	P	t-	-1.0651	0.8479	70S	114E	0		
-0829-Aug-05	07:45:24	22302	557	-34983	61	T+	t-	0.9974	1.0061	69N	45W	0		
-0829-Dec-30	12:59:46	22295	557	-34978	28	P	-t	1.0805	0.8448	66N	92E	0		
-0828-Jun-25	03:52:23	22287	556	-34972	33	A	-t	-0.9687	0.9501	52S	133W	14	760	04m51s
-0828-Dec-19	03:12:38	22279	556	-34966	38	T	-n	0.3736	1.0443	2S	131W	68	159	04m16s
-0827-Jun-14	04:45:10	22271	556	-34960	43	A	nn	-0.2146	0.9494	11N	158W	78	190	06m42s
-0827-Dec-08	18:49:46	22263	556	-34954	48	T	n-	-0.2962	1.0338	39S	16W	73	119	02m47s
-0826-Jun-03	07:19:55	22255	556	-34948	53	A	p-	0.5559	0.9792	53N	145E	56	89	01m47s
-0826-Nov-28	07:09:59	22246	556	-34942	58	P	p-	-1.0168	0.9496	63S	28E	0		
-0825-Apr-24	08:49:19	22240	555	-34937	25	P	-t	-1.2772	0.4872	61S	148W	0		
-0825-May-23	16:51:04	22238	555	-34936	63	P	t-	1.2848	0.4732	62N	113W	0		
-0825-Oct-18	18:01:19	22231	555	-34931	30	P	-t	1.2562	0.5239	61N	78E	0		
-0824-Apr-13	01:37:15	22223	555	-34925	35	T	-p	-0.5313	1.0747	22S	95W	58	282	05m49s
-0824-Oct-06	17:17:35	22215	555	-34919	40	A	-p	0.5689	0.9292	28N	30E	55	316	07m29s
-0823-Apr-02	17:49:30	22207	555	-34913	45	T	nn	0.2060	1.0451	12N	1E	78	153	03m51s
-0823-Sep-25	21:26:19	22199	554	-34907	50	A	n-	-0.1584	0.9802	6S	55W	81	71	01m58s
-0822-Mar-23	04:56:00	22191	554	-34901	55	A+	t-	1.0011	0.9792	61N	116E	0		
-0822-Sep-15	08:58:58	22182	554	-34895	60	T	p-	-0.8533	1.0283	44S	103E	31	180	02m06s
-0821-Feb-10	15:43:45	22176	554	-34890	27	P	-t	-1.1536	0.6959	62S	166E	0		
-0821-Aug-06	16:27:09	22167	554	-34884	32	P	-t	1.0637	0.8947	63N	160E	0		

-0821-Sep-05	00:53:47	22166	554	-34883	70	Pb	t-	-1.5108	0.0411	61S	171W	0		
-0820-Jan-30	16:23:52	22159	554	-34878	37	A	-p	-0.4263	0.9487	44S	42E	65	208	05m00s
-0820-Jul-26	06:31:40	22151	553	-34872	42	H3	-p	0.3560	1.0161	42N	178W	69	59	01m24s
-0819-Jan-18	23:23:13	22143	553	-34866	47	H	n-	0.3049	1.0001	5S	79W	72	0	00m00s
-0819-Jul-15	14:07:26	22135	553	-34860	52	A	p-	-0.4185	0.9652	1S	55E	65	138	04m27s
-0818-Jan-08	12:48:17	22127	553	-34854	57	T	t-	0.9746	1.0296	53N	66E	12	465	02m12s
-0818-Jul-04	15:30:52	22119	553	-34848	62	P	t-	-1.1884	0.6397	65S	22E	0		
-0818-Nov-29	17:30:26	22112	552	-34843	29	P	-t	-1.0729	0.8629	68S	153W	0		
-0817-May-25	04:51:37	22104	552	-34837	34	A	-p	0.8507	0.9891	75N	166E	31	74	00m45s
-0817-Nov-19	04:07:16	22095	552	-34831	39	A	-p	-0.4196	0.9667	42S	158W	65	132	03m14s
-0816-May-13	16:19:28	22087	552	-34825	44	T	nn	0.0457	1.0521	19N	25E	87	173	04m56s
-0816-Nov-07	07:26:00	22079	552	-34819	49	A	n-	0.2758	0.9244	1N	161E	74	296	10m21s
-0815-May-03	08:44:33	22071	552	-34813	54	T	p-	-0.6951	1.0754	30S	151E	46	338	06m13s
-0815-Oct-27	06:26:42	22063	551	-34807	59	A	p-	0.9532	0.9122	59N	158W	17	1124	08m07s
-0814-Mar-24	17:01:08	22056	551	-34802	26	P	-t	1.1433	0.7347	72N	65W	0		
-0814-Apr-23	01:37:41	22055	551	-34801	64	P	t-	-1.4422	0.1717	71S	51W	0		
-0814-Sep-16	18:55:56	22048	551	-34796	31	P	-t	-1.2485	0.5388	71S	84W	0		
-0813-Mar-14	02:00:59	22040	551	-34790	36	A	-p	0.4287	0.9684	18N	123W	64	125	03m36s
-0813-Sep-06	08:13:14	22032	551	-34784	41	T	-p	-0.4972	1.0482	19S	140E	60	184	04m22s
-0812-Mar-02	03:56:00	22024	550	-34778	46	A	nn	-0.3123	0.9353	28S	138W	72	253	07m45s
-0812-Aug-26	00:36:46	22015	550	-34772	51	T	n-	0.2066	1.0605	25N	94W	78	203	05m13s
-0811-Feb-19	04:07:24	22007	550	-34766	56	P	t-	-1.0239	0.9200	70S	10W	0		
-0811-Aug-15	15:25:52	21999	550	-34760	61	T	p-	0.9516	1.0121	79N	128E	17	140	00m42s
-0810-Jan-09	21:28:13	21993	550	-34755	28	P	-t	1.0880	0.8328	67N	47W	0		
-0810-Jul-06	10:27:39	21984	550	-34749	33	P	-t	-1.0490	0.8819	66S	123E	0		
-0810-Dec-30	11:59:12	21976	549	-34743	38	T	-n	0.3789	1.0467	2S	95E	68	168	04m33s
-0809-Jun-25	11:07:39	21968	549	-34737	43	A	np	-0.3005	0.9486	6N	106E	73	198	07m04s
-0809-Dec-20	03:37:30	21960	549	-34731	48	T	n-	-0.2944	1.0331	40S	146W	73	117	02m45s
-0808-Jun-13	14:00:16	21952	549	-34725	53	A	p-	0.4713	0.9825	50N	50E	62	70	01m34s
-0808-Dec-08	15:43:25	21944	549	-34719	58	P	p-	-1.0195	0.9438	64S	111W	0		
-0807-May-04	16:09:45	21937	549	-34714	25	P	-t	-1.3454	0.3565	62S	92E	0		
-0807-Jun-02	23:57:58	21936	548	-34713	63	P	t-	1.2040	0.6244	63N	130E	0		
-0807-Oct-29	01:56:07	21929	548	-34708	30	P	-t	1.2675	0.5051	61N	51W	0		

-0806-Apr-24	09:09:53	21921	548	-34702	35	T	-p	-0.6000	1.0752	23S	151E	53	300	05m56s
-0806-Oct-18	01:10:37	21913	548	-34696	40	A	-p	0.5834	0.9286	25N	91W	54	322	07m47s
-0805-Apr-14	01:17:01	21905	548	-34690	45	T	nn	0.1411	1.0445	13N	112W	82	150	03m50s
-0805-Oct-07	05:35:51	21896	548	-34684	50	A	n-	-0.1400	0.9808	9S	179W	82	69	01m53s
-0804-Apr-02	12:03:59	21888	547	-34678	55	A	p-	0.9405	0.9759	56N	35E	19	250	01m44s
-0804-Sep-25	17:20:10	21880	547	-34672	60	T	p-	-0.8280	1.0284	45S	25W	34	168	02m03s
-0803-Feb-20	22:58:14	21874	547	-34667	27	P	-t	-1.1954	0.6262	61S	47E	0		
-0803-Aug-17	00:20:17	21865	547	-34661	32	P	-t	1.1126	0.8000	62N	31E	0		
-0803-Sep-15	09:12:44	21864	547	-34660	70	P	t-	-1.4826	0.0963	61S	54E	0		
-0802-Feb-10	00:01:23	21857	547	-34655	37	A	-p	-0.4576	0.9539	42S	71W	63	188	04m23s
-0802-Aug-06	13:58:29	21849	547	-34649	42	H	-p	0.4139	1.0094	42N	73E	65	36	00m48s
-0801-Jan-30	07:34:50	21841	546	-34643	47	H	n-	0.2828	1.0061	4S	156E	74	22	00m38s
-0801-Jul-26	20:58:39	21833	546	-34637	52	A	p-	-0.3501	0.9606	2N	49W	70	152	04m57s
-0800-Jan-19	21:22:34	21825	546	-34631	57	T	t-	0.9590	1.0346	49N	68W	16	417	02m36s
-0800-Jul-14	22:01:50	21817	546	-34625	62	P	t-	-1.1111	0.7710	64S	87W	0		
-0800-Dec-10	02:16:12	21810	546	-34620	29	P	-t	-1.0760	0.8568	67S	62E	0		

8TH CENTURY BCE

In the 8th century BCE the total number of solar eclipses was 234 solar eclipses: 79 partial solar eclipses, 88 annular solar eclipses (87 central annular solar eclipses with two limits, 1 central annular solar eclipses with one limit, 0 non-central annular solar eclipses with one limit), 64 total solar eclipses (64 central total solar eclipses with two limits, 0 central total solar eclipses with one limit, 0 non-central total solar eclipses with one limit), 3 hybrid solar eclipses.

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°.	°	ALT	WIDTH	DUR.

GREATEST

S

°

km

ECLIPSE

-0799-Jun-04	11:39:07	21802	545	-34614	34	A	-p	0.9285	0.9898	85N	5E	21	99	00m38s
-0799-Nov-29	12:33:36	21794	545	-34608	39	A	-p	-0.4212	0.9638	45S	77E	65	144	03m29s
-0798-May-24	23:33:56	21786	545	-34602	44	Tm	nn	0.1214	1.0554	26N	86W	83	184	05m04s
-0798-Nov-18	15:29:31	21778	545	-34596	49	A	n-	0.2718	0.9225	2S	39E	74	304	10m53s
-0797-May-14	16:10:59	21770	545	-34590	54	T	p-	-0.6225	1.0778	22S	34E	51	320	06m47s
-0797-Nov-07	14:26:57	21762	545	-34584	59	A	p-	0.9459	0.9124	55N	74E	18	1042	08m34s
-0796-Apr-04	00:26:47	21755	544	-34579	26	P	-t	1.2077	0.6153	72N	168E	0		
-0796-May-03	08:58:23	21753	544	-34578	64	P	t-	-1.3763	0.2976	70S	176W	0		
-0796-Sep-27	03:05:27	21747	544	-34573	31	P	-t	-1.2659	0.5075	72S	138E	0		
-0795-Mar-24	09:06:52	21739	544	-34567	36	A	-p	0.4909	0.9679	26N	127E	60	132	03m31s
-0795-Sep-16	16:31:29	21731	544	-34561	41	T	-p	-0.5237	1.0465	24S	12E	58	181	04m03s
-0794-Mar-13	10:52:20	21723	544	-34555	46	A	nn	-0.2549	0.9381	20S	115E	75	237	07m40s
-0794-Sep-06	08:47:24	21714	543	-34549	51	T	n-	0.1720	1.0561	20N	142E	80	188	04m57s
-0793-Mar-02	11:23:48	21706	543	-34543	56	A	t-	-0.9766	0.9399	75S	172W	12	1104	04m06s
-0793-Aug-26	23:11:50	21698	543	-34537	61	T	p-	0.9111	1.0076	73N	27W	24	65	00m29s
-0792-Jan-21	05:52:53	21692	543	-34532	28	P	-t	1.0994	0.8136	68N	174E	0		
-0792-Jul-16	17:06:10	21684	543	-34526	33	P	-t	-1.1256	0.7486	67S	12E	0		
-0791-Jan-09	20:41:10	21676	543	-34520	38	T	-n	0.3886	1.0495	0S	37W	67	178	04m49s
-0791-Jul-05	17:35:08	21667	542	-34514	43	A	-p	-0.3828	0.9474	1N	7E	68	209	07m23s
-0791-Dec-30	12:20:52	21659	542	-34508	48	T	n-	-0.2894	1.0328	41S	85E	73	116	02m46s
-0790-Jun-24	20:46:54	21651	542	-34502	53	A	p-	0.3905	0.9852	47N	48W	67	57	01m24s
-0790-Dec-20	00:11:55	21643	542	-34496	58	P	p-	-1.0189	0.9438	65S	110E	0		
-0789-May-15	23:30:50	21637	542	-34491	25	P	-t	-1.4137	0.2248	62S	29W	0		
-0789-Jun-14	07:09:47	21635	542	-34490	63	P	t-	1.1261	0.7709	64N	11E	0		
-0789-Nov-09	09:54:21	21628	541	-34485	30	P	-t	1.2757	0.4914	62N	179E	0		
-0788-May-04	16:38:08	21620	541	-34479	35	T	-p	-0.6723	1.0747	25S	38E	48	322	05m59s
-0788-Oct-28	09:10:35	21612	541	-34473	40	A	-p	0.5928	0.9286	22N	146E	54	325	08m04s
-0787-Apr-24	08:36:34	21604	541	-34467	45	Tm	nn	0.0706	1.0432	14N	138E	86	145	03m47s
-0787-Oct-17	13:53:37	21596	541	-34461	50	A	n-	-0.1276	0.9817	13S	56E	83	65	01m47s
-0786-Apr-13	19:02:11	21588	541	-34455	55	A	p-	0.8726	0.9772	55N	61W	29	163	01m43s
-0786-Oct-07	01:50:32	21580	540	-34449	60	T	p-	-0.8101	1.0284	47S	155W	36	161	01m59s

-0785-Mar-04	06:02:39	21573	540	-34444	27	P	-t	-1.2455	0.5423	61S	69W	0		
-0785-Aug-28	08:20:18	21565	540	-34438	32	P	-t	1.1555	0.7174	61N	99W	0		
-0785-Sep-26	17:39:12	21564	540	-34437	70	P	t-	-1.4607	0.1391	61S	82W	0		
-0784-Feb-21	07:31:24	21557	540	-34432	37	A	-p	-0.4959	0.9594	40S	178E	60	168	03m47s
-0784-Aug-16	21:30:51	21549	540	-34426	42	H	-p	0.4664	1.0024	42N	38W	62	9	00m12s
-0783-Feb-09	15:38:45	21541	539	-34420	47	H	n-	0.2537	1.0125	3S	34E	75	44	01m15s
-0783-Aug-06	03:55:41	21533	539	-34414	52	A	nn	-0.2872	0.9557	4N	154W	73	168	05m26s
-0782-Jan-30	05:50:29	21525	539	-34408	57	T	t-	0.9380	1.0400	46N	160E	20	386	03m01s
-0782-Jul-26	04:39:38	21517	539	-34402	62	P	t-	-1.0389	0.8929	63S	163E	0		
-0782-Dec-21	10:59:20	21510	539	-34397	29	P	-t	-1.0808	0.8475	66S	80W	0		
-0781-Jun-15	18:30:46	21502	539	-34391	34	P	-t	1.0036	0.9817	67N	173E	0		
-0781-Dec-10	20:59:05	21494	538	-34385	39	A	-p	-0.4228	0.9615	48S	48W	65	154	03m41s
-0780-Jun-04	06:48:50	21486	538	-34379	44	T	nn	0.1973	1.0580	33N	164E	78	195	05m06s
-0780-Nov-28	23:34:27	21478	538	-34373	49	A	nn	0.2694	0.9212	5S	84W	74	309	11m17s
-0779-May-24	23:36:05	21470	538	-34367	54	T	p-	-0.5484	1.0792	14S	82W	57	305	07m12s
-0779-Nov-17	22:29:53	21462	538	-34361	59	A	p-	0.9404	0.9132	52N	55W	19	985	08m53s
-0778-Apr-15	07:45:46	21456	538	-34356	26	P	-t	1.2766	0.4880	71N	43E	0		
-0778-May-14	16:16:40	21454	537	-34355	64	P	t-	-1.3089	0.4263	70S	61E	0		
-0778-Oct-08	11:23:39	21448	537	-34350	31	P	-t	-1.2771	0.4873	72S	2W	0		
-0777-Apr-04	16:05:05	21440	537	-34344	36	A	-p	0.5583	0.9669	35N	17E	56	143	03m25s
-0777-Sep-28	00:56:59	21432	537	-34338	41	T	-p	-0.5446	1.0449	30S	117W	57	177	03m46s
-0776-Mar-23	17:40:28	21424	537	-34332	46	A	nn	-0.1908	0.9407	13S	10E	79	223	07m32s
-0776-Sep-16	17:05:44	21416	537	-34326	51	T	n-	0.1443	1.0517	14N	15E	82	173	04m39s
-0775-Mar-12	18:30:16	21408	536	-34320	56	A	t-	-0.9205	0.9479	67S	39E	23	493	04m01s
-0775-Sep-06	07:06:31	21400	536	-34314	61	H	p-	0.8787	1.0025	66N	160W	28	18	00m10s
-0774-Jan-31	14:09:24	21393	536	-34309	28	P	-t	1.1178	0.7812	69N	37E	0		
-0774-Jul-27	23:51:43	21385	536	-34303	33	P	-t	-1.1956	0.6277	68S	102W	0		
-0773-Jan-21	05:16:12	21377	536	-34297	38	T	-n	0.4041	1.0525	2N	168W	66	190	05m04s
-0773-Jul-17	00:09:40	21369	536	-34291	43	A	-p	-0.4593	0.9459	4S	94W	63	224	07m36s
-0772-Jan-10	20:58:53	21361	535	-34285	48	T	n-	-0.2804	1.0329	40S	43W	74	116	02m49s
-0772-Jul-05	03:37:40	21353	535	-34279	53	A	p-	0.3121	0.9873	42N	148W	72	47	01m15s
-0772-Dec-30	08:37:00	21345	535	-34273	58	P	p-	-1.0165	0.9474	66S	27W	0		
-0771-May-26	06:49:57	21338	535	-34268	25	Pe	-t	-1.4836	0.0894	63S	149W	0		

-0771-Jun-24	14:24:17	21337	535	-34267	63	P	t-	1.0497	0.9152	65N	108W	0		
-0771-Nov-19	17:55:40	21330	535	-34262	30	P	-t	1.2810	0.4826	62N	49E	0		
-0770-May-16	00:03:30	21322	534	-34256	35	T	-p	-0.7467	1.0732	28S	75W	42	351	05m54s
-0770-Nov-08	17:16:36	21314	534	-34250	40	A	-p	0.5973	0.9292	19N	22E	53	324	08m19s
-0769-May-05	15:51:45	21306	534	-34244	45	T	nn	-0.0031	1.0413	13N	29E	90	138	03m44s
-0769-Oct-28	22:17:49	21298	534	-34238	50	A	n-	-0.1197	0.9829	17S	72W	83	61	01m40s
-0768-Apr-24	01:54:08	21290	534	-34232	55	A	p-	0.8004	0.9776	54N	159W	37	131	01m44s
-0768-Oct-17	10:27:21	21282	534	-34226	60	T	p-	-0.7970	1.0284	50S	73E	37	157	01m56s
-0767-Mar-14	12:58:02	21276	533	-34221	27	P	-t	-1.3026	0.4458	61S	177E	0		
-0767-Sep-07	16:28:07	21268	533	-34215	32	P	-t	1.1917	0.6482	61N	129E	0		
-0767-Oct-07	02:12:51	21266	533	-34214	70	P	t-	-1.4448	0.1703	61S	139E	0		
-0766-Mar-03	14:54:08	21260	533	-34209	37	A	-p	-0.5410	0.9648	38S	68E	57	149	03m14s
-0766-Aug-28	05:10:27	21252	533	-34203	42	A	-p	0.5118	0.9955	40N	152W	59	18	00m23s
-0765-Feb-20	23:35:49	21244	533	-34197	47	T	n-	0.2179	1.0190	2S	86W	77	66	01m49s
-0765-Aug-17	11:00:24	21236	532	-34191	52	A	nn	-0.2312	0.9507	4N	99E	77	185	05m53s
-0764-Feb-10	14:10:30	21228	532	-34185	57	T	p-	0.9102	1.0456	43N	32E	24	362	03m25s
-0764-Aug-05	11:25:19	21220	532	-34179	62	A	t-	-0.9726	0.9282	52S	65E	13	1179	06m53s
-0764-Dec-31	19:37:16	21213	532	-34174	29	P	-t	-1.0897	0.8311	65S	138E	0		
-0763-Jun-26	01:27:23	21205	532	-34168	34	P	-t	1.0756	0.8524	66N	57E	0		
-0763-Dec-21	05:19:14	21197	532	-34162	39	A	-p	-0.4283	0.9598	49S	169W	64	162	03m49s
-0762-Jun-15	14:07:08	21189	531	-34156	44	T	-n	0.2714	1.0596	39N	54E	74	204	05m00s
-0762-Dec-10	07:37:49	21181	531	-34150	49	A	nn	0.2655	0.9206	7S	154E	75	312	11m29s
-0761-Jun-05	07:00:39	21173	531	-34144	54	T	p-	-0.4738	1.0797	7S	163E	62	292	07m25s
-0761-Nov-29	06:35:31	21165	531	-34138	59	A	p-	0.9365	0.9145	49N	177E	20	940	09m04s
-0760-Apr-25	14:56:54	21158	531	-34133	26	P	-t	1.3510	0.3508	71N	79W	0		
-0760-May-24	23:30:50	21157	531	-34132	64	P	t-	-1.2384	0.5602	69S	61W	0		
-0760-Oct-18	19:50:15	21151	530	-34127	31	P	-t	-1.2823	0.4779	71S	144W	0		
-0759-Apr-14	22:52:41	21143	530	-34121	36	A	-p	0.6335	0.9654	44N	90W	50	160	03m20s
-0759-Oct-08	09:31:26	21135	530	-34115	41	T	-p	-0.5583	1.0434	35S	111E	56	174	03m31s
-0758-Apr-04	00:20:28	21127	530	-34109	46	A	nn	-0.1201	0.9432	4S	94W	83	211	07m20s
-0758-Sep-28	01:31:14	21119	530	-34103	51	T	n-	0.1229	1.0474	8N	114W	83	159	04m20s
-0757-Mar-24	01:31:30	21111	530	-34097	56	A	t-	-0.8590	0.9550	57S	83W	30	319	03m50s
-0757-Sep-17	15:07:45	21103	529	-34091	61	A	p-	0.8523	0.9970	60N	71E	31	20	00m13s

-0756-Feb-11	22:20:19	21096	529	-34086	28	P	-t	1.1416	0.7385	70N	99W	0		
-0756-Mar-12	08:51:01	21095	529	-34085	66	Pb	t-	-1.5418	0.0046	71S	112W	0		
-0756-Aug-07	06:42:24	21088	529	-34080	33	P	-t	-1.2605	0.5165	69S	142E	0		
-0755-Jan-31	13:45:08	21080	529	-34074	38	T	-n	0.4249	1.0556	6N	62E	65	202	05m17s
-0755-Jul-27	06:51:52	21072	529	-34068	43	A	-p	-0.5296	0.9441	11S	163E	58	243	07m42s
-0754-Jan-21	05:29:09	21064	528	-34062	48	T	n-	-0.2657	1.0333	37S	169W	74	117	02m54s
-0754-Jul-16	10:37:34	21056	528	-34056	53	A	n-	0.2403	0.9888	37N	108E	76	41	01m09s
-0753-Jan-10	16:54:49	21048	528	-34050	58	P	p-	-1.0092	0.9597	67S	164W	0		
-0753-Jul-05	21:44:31	21041	528	-34044	63	T	t-	0.9771	1.0328	77N	138E	12	560	01m40s
-0753-Dec-01	01:56:44	21034	528	-34039	30	P	-t	1.2862	0.4740	63N	82W	0		
-0752-May-26	07:27:20	21026	528	-34033	35	T	-p	-0.8220	1.0705	33S	173E	34	398	05m40s
-0752-Nov-19	01:25:42	21018	527	-34027	40	A	-p	0.6003	0.9305	17N	103W	53	320	08m28s
-0751-May-15	23:01:18	21010	527	-34021	45	T	nn	-0.0807	1.0386	13N	78W	85	130	03m37s
-0751-Nov-08	06:47:46	21002	527	-34015	50	A	n-	-0.1157	0.9848	21S	160E	83	54	01m29s
-0750-May-05	08:39:24	20994	527	-34009	55	A	p-	0.7231	0.9772	53N	105E	43	116	01m50s
-0750-Oct-28	19:10:00	20986	527	-34003	60	T	p-	-0.7883	1.0288	54S	60W	38	156	01m55s
-0749-Mar-25	19:45:08	20980	527	-33998	27	P	-t	-1.3662	0.3375	61S	66E	0		
-0749-Apr-24	11:17:03	20978	526	-33997	65	Pb	t-	1.5142	0.0834	61N	11W	0		
-0749-Sep-19	00:43:53	20972	526	-33992	32	P	-t	1.2211	0.5924	61N	5W	0		
-0749-Oct-18	10:53:27	20970	526	-33991	70	P	t-	-1.4349	0.1900	61S	1W	0		
-0748-Mar-13	22:08:43	20964	526	-33986	37	A	-p	-0.5936	0.9702	37S	41W	53	131	02m42s
-0748-Sep-07	12:57:07	20956	526	-33980	42	A	-p	0.5507	0.9886	38N	92E	56	47	00m58s
-0747-Mar-03	07:25:21	20948	526	-33974	47	T	n-	0.1750	1.0256	1S	155E	80	88	02m21s
-0747-Aug-27	18:13:03	20940	526	-33968	52	A	nn	-0.1821	0.9457	4N	10W	80	203	06m20s
-0746-Feb-20	22:22:59	20932	525	-33962	57	T	p-	0.8759	1.0511	41N	94W	29	345	03m47s
-0746-Aug-16	18:20:44	20924	525	-33956	62	A	t-	-0.9133	0.9285	44S	37W	24	644	07m18s
-0745-Jan-12	04:10:31	20917	525	-33951	29	P	-t	-1.1022	0.8080	64S	1W	0		
-0745-Jul-07	08:29:27	20910	525	-33945	34	P	-t	1.1441	0.7290	65N	60W	0		
-0744-Jan-01	13:35:45	20902	525	-33939	39	A	-p	-0.4361	0.9586	50S	70E	64	167	03m54s
-0744-Jun-25	21:28:56	20894	525	-33933	44	T	-n	0.3433	1.0605	44N	55W	70	212	04m51s
-0744-Dec-20	15:38:10	20886	524	-33927	49	A	nn	0.2596	0.9207	9S	32E	75	311	11m26s
-0743-Jun-15	14:26:47	20878	524	-33921	54	T	p-	-0.4005	1.0792	1S	49E	66	279	07m28s
-0743-Dec-09	14:40:29	20870	524	-33915	59	A	p-	0.9313	0.9166	47N	49E	21	881	09m04s

-0742-May-06	22:04:02	20863	524	-33910	26	P	-t	1.4274	0.2106	70N	160E	0		
-0742-Jun-05	06:45:25	20862	524	-33909	64	P	t-	-1.1688	0.6917	68S	177E	0		
-0742-Oct-30	04:22:02	20856	524	-33904	31	P	-t	-1.2843	0.4744	71S	73E	0		
-0741-Apr-26	05:35:10	20848	523	-33898	36	A	-p	0.7119	0.9634	54N	163E	44	188	03m16s
-0741-Oct-19	18:12:04	20840	523	-33892	41	T	-p	-0.5675	1.0423	40S	21W	55	171	03m19s
-0740-Apr-14	06:52:25	20832	523	-33886	46	A	nn	-0.0427	0.9455	4N	165E	88	201	07m04s
-0740-Oct-08	10:03:54	20824	523	-33880	51	T	n-	0.1078	1.0432	3N	116E	84	145	04m01s
-0739-Apr-03	08:24:54	20816	523	-33874	56	A	p-	-0.7898	0.9617	47S	163E	38	224	03m35s
-0739-Sep-27	23:17:03	20808	523	-33868	61	A	p-	0.8332	0.9916	54N	58W	33	53	00m40s
-0738-Feb-22	06:22:01	20801	522	-33863	28	P	-t	1.1736	0.6801	71N	127E	0		
-0738-Mar-23	16:19:19	20800	522	-33862	66	P	t-	-1.4835	0.1084	72S	121E	0		
-0738-Aug-18	13:42:38	20794	522	-33857	33	P	-t	-1.3170	0.4207	70S	24E	0		
-0737-Feb-11	22:06:09	20786	522	-33851	38	T	-p	0.4524	1.0587	10N	66W	63	216	05m27s
-0737-Aug-07	13:42:08	20778	522	-33845	43	A	-p	-0.5937	0.9421	17S	56E	53	265	07m40s
-0736-Feb-01	13:52:25	20770	522	-33839	48	T	n-	-0.2455	1.0339	34S	65E	76	118	03m01s
-0736-Jul-26	17:44:43	20762	521	-33833	53	A	nn	0.1737	0.9899	32N	2E	80	36	01m04s
-0735-Jan-21	01:04:52	20754	521	-33827	58	As	p-	-0.9963	0.9621	70S	60E	2	-	02m04s
-0735-Jul-16	05:10:37	20746	521	-33821	63	T	t-	0.9084	1.0373	89N	145W	24	306	02m06s
-0735-Dec-11	09:57:47	20740	521	-33816	30	P	-t	1.2913	0.4655	64N	147E	0		
-0734-Jun-06	14:51:03	20732	521	-33810	35	T	-t	-0.8974	1.0665	40S	60E	26	490	05m12s
-0734-Nov-30	09:36:49	20724	521	-33804	40	A	-p	0.6022	0.9324	15N	131E	53	312	08m30s
-0733-May-27	06:09:11	20716	520	-33798	45	T	nn	-0.1589	1.0352	11N	175E	81	120	03m26s
-0733-Nov-19	15:21:43	20708	520	-33792	50	A	n-	-0.1142	0.9871	24S	31E	83	46	01m16s
-0732-May-15	15:19:19	20700	520	-33786	55	A	p-	0.6421	0.9761	52N	11E	50	110	01m59s
-0732-Nov-08	03:57:25	20692	520	-33780	60	T	p-	-0.7833	1.0293	58S	166E	38	158	01m54s
-0731-Apr-05	02:25:16	20686	520	-33775	27	P	-t	-1.4351	0.2195	61S	44W	0		
-0731-May-04	17:40:37	20684	520	-33774	65	P	t-	1.4326	0.2228	62N	117W	0		
-0731-Sep-29	09:06:39	20678	519	-33769	32	P	-t	1.2446	0.5482	61N	141W	0		
-0731-Oct-28	19:38:29	20677	519	-33768	70	P	t-	-1.4288	0.2022	61S	142W	0		
-0730-Mar-25	05:17:18	20670	519	-33763	37	A	-p	-0.6520	0.9753	36S	148W	49	114	02m13s
-0730-Sep-18	20:51:38	20662	519	-33757	42	A	-p	0.5821	0.9821	35N	27W	54	77	01m34s
-0729-Mar-14	15:08:43	20654	519	-33751	47	T	n-	0.1260	1.0320	1N	39E	83	109	02m52s
-0729-Sep-08	01:33:11	20646	519	-33745	52	A	nn	-0.1396	0.9409	2N	121W	82	221	06m47s

-0728-Mar-03	06:27:42	20639	519	-33739	57	T	p-	0.8349	1.0565	40N	143E	33	331	04m07s
-0728-Aug-27	01:25:56	20631	518	-33733	62	A	p-	-0.8615	0.9277	40S	144W	30	518	07m27s
-0727-Jan-22	12:34:24	20624	518	-33728	29	P	-t	-1.1221	0.7717	63S	138W	0		
-0727-Jul-17	15:39:42	20616	518	-33722	34	P	-t	1.2067	0.6156	64N	179W	0		
-0727-Aug-16	03:49:48	20615	518	-33721	72	Pb	t-	-1.5439	0.0208	62S	154E	0		
-0726-Jan-11	21:44:05	20608	518	-33716	39	A	-p	-0.4502	0.9579	49S	49W	63	172	03m56s
-0726-Jul-07	04:56:14	20601	518	-33710	44	T	-n	0.4112	1.0607	48N	164W	65	219	04m38s
-0726-Dec-31	23:32:56	20593	517	-33704	49	A	nn	0.2492	0.9215	9S	88W	76	306	11m10s
-0725-Jun-26	21:55:04	20585	517	-33698	54	T	n-	-0.3290	1.0777	5N	65W	71	266	07m18s
-0725-Dec-20	22:44:49	20577	517	-33692	59	A	p-	0.9250	0.9194	44N	78W	22	812	08m54s
-0724-May-17	05:04:08	20570	517	-33687	26	Pe	-t	1.5083	0.0630	70N	41E	0		
-0724-Jun-15	13:57:19	20569	517	-33686	64	P	t-	-1.0975	0.8252	67S	57E	0		
-0724-Nov-09	13:00:17	20563	517	-33681	31	P	-t	-1.2819	0.4787	70S	71W	0		
-0724-Dec-09	02:48:25	20561	517	-33680	69	Pb	t-	1.5522	0.0054	67N	130W	0		
-0723-May-06	12:09:52	20555	517	-33675	36	A	-p	0.7959	0.9606	64N	56E	37	236	03m12s
-0723-Oct-30	02:58:32	20547	516	-33669	41	T	-p	-0.5721	1.0416	45S	154W	55	169	03m10s
-0722-Apr-25	13:19:24	20539	516	-33663	46	Am	nn	0.0390	0.9475	13N	64E	88	193	06m45s
-0722-Oct-19	18:42:52	20531	516	-33657	51	T	nn	0.0981	1.0393	2S	16W	84	132	03m42s
-0721-Apr-14	15:14:53	20523	516	-33651	56	A	p-	-0.7168	0.9681	37S	53E	44	163	03m15s
-0721-Oct-09	07:31:34	20515	516	-33645	61	A	p-	0.8193	0.9863	49N	173E	35	84	01m09s
-0720-Mar-04	14:18:25	20509	516	-33640	28	P	-t	1.2106	0.6117	71N	7W	0		
-0720-Apr-02	23:43:35	20508	515	-33639	66	P	t-	-1.4210	0.2215	72S	6W	0		
-0720-Aug-28	20:50:04	20501	515	-33634	33	P	-t	-1.3667	0.3371	71S	97W	0		
-0719-Feb-22	06:19:02	20493	515	-33628	38	T	-p	0.4867	1.0617	15N	168E	61	231	05m32s
-0719-Aug-17	20:42:46	20485	515	-33622	43	A	-p	-0.6495	0.9400	24S	53W	49	291	07m31s
-0718-Feb-11	22:06:46	20478	515	-33616	48	T	n-	-0.2187	1.0345	29S	59W	77	119	03m08s
-0718-Aug-07	01:01:56	20470	515	-33610	53	A	nn	0.1144	0.9906	26N	108W	83	33	01m01s
-0717-Feb-01	09:05:30	20462	514	-33604	58	A	p-	-0.9767	0.9643	79S	95W	12	646	02m07s
-0717-Jul-27	12:44:51	20454	514	-33598	63	T	t-	0.8459	1.0398	79N	96E	32	252	02m24s
-0717-Dec-22	17:55:07	20448	514	-33593	30	P	-t	1.2992	0.4524	65N	17E	0		
-0716-Jun-16	22:14:53	20440	514	-33587	35	T	-t	-0.9721	1.0601	52S	52W	13	871	04m21s
-0716-Dec-10	17:47:56	20432	514	-33581	40	A	-p	0.6046	0.9351	14N	6E	53	301	08m22s
-0715-Jun-06	13:14:50	20424	514	-33575	45	T	-n	-0.2378	1.0309	9N	68E	76	108	03m10s

-0715-Nov-29	23:56:51	20416	513	-33569	50	A	n-	-0.1132	0.9901	27S	98W	83	35	00m59s
-0714-May-26	21:56:20	20408	513	-33563	55	A	p-	0.5596	0.9743	51N	83W	56	110	02m14s
-0714-Nov-19	12:48:22	20401	513	-33557	60	T	p-	-0.7814	1.0303	63S	32E	38	164	01m56s
-0713-Apr-16	08:58:54	20394	513	-33552	27	Pe	-t	-1.5089	0.0922	61S	152W	0		
-0713-May-16	00:00:08	20393	513	-33551	65	P	t-	1.3472	0.3687	62N	138E	0		
-0713-Oct-10	17:36:09	20386	513	-33546	32	P	-t	1.2622	0.5154	61N	82E	0		
-0713-Nov-09	04:28:07	20385	513	-33545	70	P	t-	-1.4270	0.2063	62S	75E	0		
-0712-Apr-04	12:19:52	20378	512	-33540	37	A	-p	-0.7161	0.9802	36S	107E	44	98	01m47s
-0712-Sep-29	04:53:39	20371	512	-33534	42	A	-p	0.6066	0.9758	33N	149W	52	107	02m11s
-0711-Mar-24	22:44:33	20363	512	-33528	47	T	nn	0.0697	1.0382	2N	76W	86	128	03m21s
-0711-Sep-18	09:02:41	20355	512	-33522	52	A	nn	-0.1053	0.9363	0S	126E	84	238	07m15s
-0710-Mar-14	14:25:26	20347	512	-33516	57	T	p-	0.7878	1.0617	39N	22E	38	321	04m26s
-0710-Sep-07	08:40:36	20339	512	-33510	62	A	p-	-0.8167	0.9266	39S	106E	35	462	07m29s
-0709-Feb-02	20:51:37	20333	511	-33505	29	P	-t	-1.1469	0.7263	63S	87E	0		
-0709-Mar-04	06:55:43	20331	511	-33504	67	Pb	t-	1.5026	0.0609	61N	93E	0		
-0709-Jul-28	22:57:46	20325	511	-33499	34	P	-t	1.2639	0.5119	63N	61E	0		
-0709-Aug-27	11:16:05	20324	511	-33498	72	P	t-	-1.4933	0.1097	61S	32E	0		
-0708-Jan-23	05:45:23	20317	511	-33493	39	A	-p	-0.4693	0.9575	48S	166W	62	175	03m56s
-0708-Jul-17	12:28:26	20309	511	-33487	44	T	-p	0.4754	1.0601	50N	87E	61	225	04m25s
-0707-Jan-11	07:21:57	20302	511	-33481	49	A	nn	0.2341	0.9229	10S	154E	77	299	10m42s
-0707-Jul-07	05:27:27	20294	510	-33475	54	T	n-	-0.2610	1.0755	9N	180E	75	253	07m00s
-0707-Dec-31	06:44:04	20286	510	-33469	59	A	p-	0.9137	0.9230	42N	156E	24	719	08m34s
-0706-Jun-26	21:12:31	20278	510	-33463	64	P	t-	-1.0294	0.9516	66S	64W	0		
-0706-Nov-20	21:40:53	20272	510	-33458	31	P	-t	-1.2788	0.4844	69S	145E	0		
-0706-Dec-20	11:15:18	20270	510	-33457	69	P	t-	1.5449	0.0163	66N	91E	0		
-0705-May-17	18:41:08	20264	510	-33452	36	A	-t	0.8816	0.9569	76N	60W	28	336	03m08s
-0705-Nov-10	11:48:33	20256	510	-33446	41	T	-p	-0.5743	1.0413	49S	73E	55	169	03m04s
-0704-May-05	19:41:48	20248	509	-33440	46	A	nn	0.1249	0.9491	21N	34W	83	188	06m23s
-0704-Oct-30	03:26:41	20240	509	-33434	51	T	nn	0.0930	1.0359	7S	149W	85	121	03m26s
-0703-Apr-24	21:59:09	20233	509	-33428	56	A	p-	-0.6380	0.9739	28S	55W	50	120	02m51s
-0703-Oct-19	15:53:05	20225	509	-33422	61	A	p-	0.8118	0.9813	44N	43E	35	113	01m40s
-0702-Mar-15	22:06:33	20218	509	-33417	28	P	-t	1.2548	0.5287	71N	139W	0		
-0702-Apr-14	07:02:24	20217	509	-33416	66	P	t-	-1.3528	0.3464	71S	131W	0		

-0696-Jun-06	04:31:30	20119	506	-33340	55	A	p-	0.4763	0.9720	49N	177W	61	114	02m35s
-0696-Nov-29	21:40:06	20111	506	-33334	60	T	p-	-0.7795	1.0318	67S	99W	38	172	01m59s
-0695-May-26	06:18:24	20103	506	-33328	65	P	t-	1.2601	0.5178	63N	33E		0	
-0695-Oct-21	02:11:29	20097	506	-33323	32	P	-t	1.2750	0.4916	61N	57W		0	
-0695-Nov-19	13:19:39	20095	506	-33322	70	P	t-	-1.4270	0.2067	62S	68W		0	
-0694-Apr-15	19:19:05	20089	505	-33317	37	A	-p	-0.7841	0.9844	38S	2E	38	87	01m23s
-0694-Oct-10	13:01:03	20081	505	-33311	42	A	-p	0.6260	0.9701	30N	87E	51	135	02m48s
-0693-Apr-05	06:15:45	20073	505	-33305	47	T	nn	0.0084	1.0440	3N	171E	89	147	03m49s
-0693-Sep-29	16:39:36	20066	505	-33299	52	A	nn	-0.0774	0.9320	3S	10E	86	255	07m43s
-0692-Mar-24	22:14:38	20058	505	-33293	57	T	p-	0.7333	1.0664	39N	95W	43	313	04m42s
-0692-Sep-17	16:05:47	20050	505	-33287	62	A	p-	-0.7799	0.9254	39S	8W	39	434	07m27s
-0691-Feb-13	04:58:03	20044	504	-33282	29	P	-t	-1.1801	0.6655	62S	44W		0	
-0691-Mar-14	14:47:35	20042	504	-33281	67	P	t-	1.4597	0.1419	61N	35W		0	
-0691-Aug-08	06:25:48	20036	504	-33276	34	P	-t	1.3139	0.4209	63N	61W		0	
-0691-Sep-06	18:54:09	20035	504	-33275	72	P	t-	-1.4509	0.1841	61S	93W		0	
-0690-Feb-02	13:35:36	20028	504	-33270	39	A	-p	-0.4970	0.9573	46S	79E	60	178	03m55s
-0690-Jul-28	20:08:44	20020	504	-33264	44	T	-p	0.5336	1.0589	52N	24W	58	229	04m11s
-0689-Jan-22	15:03:34	20013	504	-33258	49	A	nn	0.2129	0.9248	10S	38E	78	290	10m05s
-0689-Jul-18	13:03:10	20005	503	-33252	54	T	n-	-0.1958	1.0724	12N	65E	79	240	06m35s
-0688-Jan-11	14:40:07	19997	503	-33246	59	A	p-	0.8990	0.9274	40N	32E	26	622	08m04s
-0688-Jul-07	04:28:32	19989	503	-33240	64	T	t-	-0.9622	1.0234	50S	177W	15	299	01m53s
-0688-Dec-01	06:23:54	19983	503	-33235	31	P	-t	-1.2744	0.4924	68S	2E		0	
-0688-Dec-30	19:39:59	19982	503	-33234	69	P	t-	1.5352	0.0313	65N	47W		0	
-0687-May-28	01:08:20	19975	503	-33229	36	A	-t	0.9696	0.9513	80N	113E	13	770	03m05s
-0687-Nov-20	20:41:59	19967	502	-33223	41	T	-p	-0.5740	1.0414	53S	59W	55	170	03m01s
-0686-May-17	02:02:40	19960	502	-33217	46	A	nn	0.2120	0.9503	29N	132W	78	187	05m59s
-0686-Nov-10	12:13:25	19952	502	-33211	51	T	nn	0.0906	1.0328	10S	78E	85	111	03m10s
-0685-May-06	04:43:05	19944	502	-33205	56	A	p-	-0.5576	0.9793	19S	161W	56	88	02m23s
-0685-Oct-31	00:18:24	19936	502	-33199	61	A	p-	0.8081	0.9767	40N	88W	36	140	02m11s
-0684-Mar-26	05:48:42	19930	501	-33194	28	P	-t	1.3046	0.4343	72N	90E		0	
-0684-Apr-24	14:17:40	19929	501	-33193	66	P	t-	-1.2807	0.4802	71S	106E		0	
-0684-Sep-19	11:31:45	19922	501	-33188	33	P	-t	-1.4429	0.2109	72S	13E		0	
-0684-Oct-19	05:25:30	19921	501	-33187	71	Pb	t-	1.5575	0.0157	71N	114W		0	

-0683-Mar-15	22:21:06	19915	501	-33182	38	T	-p	0.5757	1.0665	29N	81W	55	264	05m28s
-0683-Sep-08	11:14:51	19907	501	-33176	43	A	-p	-0.7370	0.9361	37S	79E	42	348	07m02s
-0682-Mar-05	14:07:25	19899	501	-33170	48	T	nn	-0.1430	1.0356	17S	57E	82	121	03m23s
-0682-Aug-28	16:06:01	19891	501	-33164	53	A	nn	0.0174	0.9913	14N	22E	89	31	00m57s
-0681-Feb-23	00:38:02	19884	500	-33158	58	A	p-	-0.9161	0.9674	73S	51W	23	296	02m16s
-0681-Aug-18	04:17:26	19876	500	-33152	63	T	p-	0.7389	1.0416	62N	142W	42	207	02m50s
-0680-Jan-13	09:34:47	19869	500	-33147	30	P	-t	1.3264	0.4068	67N	119E	0		
-0680-Jul-08	13:11:34	19862	500	-33141	35	P	-t	-1.1126	0.8028	66S	70E	0		
-0680-Aug-06	20:41:48	19860	500	-33140	73	P	t-	1.4219	0.2077	69N	107E	0		
-0679-Jan-01	10:04:16	19854	500	-33135	40	A	-p	0.6159	0.9423	14N	116E	52	271	07m32s
-0679-Jun-28	03:26:40	19846	499	-33129	45	T	-p	-0.3924	1.0206	1N	147W	67	76	02m16s
-0679-Dec-21	17:07:21	19839	499	-33123	50	A	n-	-0.1092	0.9977	30S	5E	84	8	00m14s
-0678-Jun-17	11:06:31	19831	499	-33117	55	A	p-	0.3934	0.9691	46N	88E	67	121	03m01s
-0678-Dec-11	06:31:30	19823	499	-33111	60	T	p-	-0.7774	1.0338	71S	132E	39	182	02m06s
-0677-Jun-06	12:36:07	19815	499	-33105	65	P	t-	1.1721	0.6683	64N	72W	0		
-0677-Nov-01	10:51:59	19809	498	-33100	32	P	-t	1.2833	0.4765	61N	163E	0		
-0677-Nov-30	22:12:48	19808	498	-33099	70	P	t-	-1.4287	0.2038	63S	148E	0		
-0676-Apr-26	02:12:34	19801	498	-33094	37	A	-p	-0.8575	0.9878	41S	101W	31	81	01m04s
-0676-Oct-20	21:15:04	19794	498	-33088	42	A	-p	0.6392	0.9648	27N	39W	50	161	03m26s
-0675-Apr-15	13:41:22	19786	498	-33082	47	T	nn	-0.0581	1.0493	4N	59E	87	164	04m17s
-0675-Oct-10	00:24:17	19778	498	-33076	52	A	nn	-0.0564	0.9282	7S	107W	87	270	08m13s
-0674-Apr-05	05:58:15	19770	497	-33070	57	T	p-	0.6741	1.0706	39N	149E	47	306	04m58s
-0674-Sep-28	23:40:37	19763	497	-33064	62	A	p-	-0.7507	0.9243	40S	123W	41	419	07m22s
-0673-Feb-24	12:56:49	19756	497	-33059	29	P	-t	-1.2190	0.5943	61S	174W	0		
-0673-Mar-25	22:32:45	19755	497	-33058	67	P	t-	1.4118	0.2324	61N	162W	0		
-0673-Aug-19	14:01:50	19749	497	-33053	34	P	-t	1.3583	0.3402	62N	174E	0		
-0673-Sep-18	02:41:02	19747	497	-33052	72	P	t-	-1.4146	0.2476	61S	141E	0		
-0672-Feb-13	21:17:42	19741	497	-33047	39	A	-p	-0.5306	0.9573	44S	35W	58	182	03m54s
-0672-Aug-08	03:56:04	19733	497	-33041	44	T	-p	0.5865	1.0572	51N	137W	54	232	03m59s
-0671-Feb-01	22:35:46	19726	496	-33035	49	A	nn	0.1839	0.9271	9S	76W	79	278	09m24s
-0671-Jul-28	20:45:34	19718	496	-33029	54	T	nn	-0.1365	1.0688	14N	51W	82	226	06m07s
-0670-Jan-21	22:29:00	19710	496	-33023	59	A	p-	0.8775	0.9323	38N	89W	28	521	07m26s
-0670-Jul-18	11:49:19	19702	496	-33017	64	T	p-	-0.8997	1.0208	40S	70E	26	162	01m50s

-0670-Dec-12	15:05:17	19696	496	-33012	31	P	-t	-1.2721	0.4966	67S	141W	0			
-0669-Jan-11	03:59:20	19695	496	-33011	69	P	t-	1.5202	0.0556	64N	177E	0			
-0669-Jun-08	07:35:28	19688	495	-33006	36	P	-t	1.0568	0.8695	68N	24W	0			
-0669-Dec-02	05:35:37	19681	495	-33000	41	T	-p	-0.5738	1.0421	56S	171E	55	172	03m01s	
-0668-May-27	08:20:59	19673	495	-32994	46	A	np	0.3015	0.9510	37N	132E	72	189	05m34s	
-0668-Nov-20	21:02:32	19665	495	-32988	51	T	nn	0.0905	1.0303	14S	55W	85	103	02m58s	
-0667-May-16	11:24:52	19658	495	-32982	56	A	p-	-0.4741	0.9841	11S	94E	62	64	01m54s	
-0667-Nov-10	08:47:03	19650	494	-32976	61	A	p-	0.8078	0.9726	37N	140E	36	166	02m42s	
-0666-Apr-06	13:24:21	19644	494	-32971	28	P	-t	1.3603	0.3279	72N	39W	0			
-0666-May-05	21:30:30	19642	494	-32970	66	P	t-	-1.2053	0.6215	70S	17W	0			
-0666-Sep-30	19:06:26	19636	494	-32965	33	P	-t	-1.4694	0.1677	72S	116W	0			
-0666-Oct-30	13:27:12	19635	494	-32964	71	P	t-	1.5518	0.0272	71N	110E	0			
-0665-Mar-27	06:10:41	19628	494	-32959	38	T	-p	0.6298	1.0681	36N	157E	51	284	05m18s	
-0665-Sep-19	18:46:17	19621	494	-32953	43	A	-p	-0.7689	0.9344	43S	39W	39	378	06m44s	
-0664-Mar-15	21:54:10	19613	494	-32947	48	Tm	nn	-0.0947	1.0359	10S	62W	85	121	03m28s	
-0664-Sep-07	23:54:01	19605	493	-32941	53	A	nn	-0.0190	0.9914	8N	97W	89	30	00m57s	
-0663-Mar-05	08:08:10	19598	493	-32935	58	A	p-	-0.8740	0.9688	65S	179E	29	231	02m22s	
-0663-Aug-28	12:17:28	19590	493	-32929	63	T	p-	0.6962	1.0416	55N	95E	46	193	02m59s	
-0662-Jan-23	17:15:15	19584	493	-32924	30	P	-t	1.3469	0.3723	68N	9W	0			
-0662-Jul-19	20:45:37	19576	493	-32918	35	P	-t	-1.1774	0.6776	67S	56W	0			
-0662-Aug-18	04:38:02	19575	493	-32917	73	P	t-	1.3759	0.2970	70N	26W	0			
-0661-Jan-12	18:06:31	19568	492	-32912	40	A	-p	0.6273	0.9466	16N	8W	51	252	06m51s	
-0661-Jul-09	10:35:24	19560	492	-32906	45	H3	-p	-0.4657	1.0146	4S	103E	62	56	01m38s	
-0660-Jan-02	01:38:58	19553	492	-32900	50	H	n-	-0.1030	1.0023	30S	122W	84	8	00m14s	
-0660-Jun-27	17:42:00	19545	492	-32894	55	A	nn	0.3115	0.9656	42N	8W	72	131	03m35s	
-0660-Dec-21	15:20:46	19538	492	-32888	60	T	p-	-0.7733	1.0364	73S	9E	39	194	02m15s	
-0659-Jun-16	18:56:22	19530	491	-32882	65	P	t-	1.0854	0.8163	64N	177W	0			
-0659-Nov-11	19:34:21	19524	491	-32877	32	P	-t	1.2896	0.4649	62N	22E	0			
-0659-Dec-11	07:03:16	19522	491	-32876	70	P	t-	-1.4289	0.2035	64S	5E	0			
-0658-May-07	09:06:06	19516	491	-32871	37	A	-t	-0.9315	0.9901	47S	158E	21	95	00m50s	
-0658-Nov-01	05:32:59	19508	491	-32865	42	A	-p	0.6480	0.9603	24N	167W	49	185	04m05s	
-0657-Apr-26	21:03:46	19501	491	-32859	47	Tm	nn	-0.1282	1.0540	4N	52W	83	180	04m44s	
-0657-Oct-21	08:15:00	19493	491	-32853	52	A	nn	-0.0408	0.9249	10S	134E	88	283	08m43s	

-0656-Apr-15	13:35:22	19485	490	-32847	57	T	p-	0.6094	1.0741	39N	35E	52	299	05m12s
-0656-Oct-09	07:25:00	19478	490	-32841	62	A	p-	-0.7285	0.9235	43S	119E	43	410	07m15s
-0655-Mar-06	20:43:28	19471	490	-32836	29	P	-t	-1.2672	0.5060	61S	59E	0		
-0655-Apr-05	06:07:59	19470	490	-32835	67	P	t-	1.3564	0.3374	61N	75E	0		
-0655-Aug-29	21:49:36	19464	490	-32830	34	P	-t	1.3944	0.2746	61N	47E	0		
-0655-Sep-28	10:39:43	19462	490	-32829	72	P	t-	-1.3868	0.2964	61S	11E	0		
-0654-Feb-24	04:48:13	19456	490	-32824	39	A	-p	-0.5733	0.9572	43S	146W	55	188	03m53s
-0654-Aug-19	11:51:38	19448	489	-32818	44	T	-p	0.6331	1.0551	50N	107E	50	233	03m47s
-0653-Feb-13	05:59:13	19441	489	-32812	49	A	nn	0.1477	0.9298	8S	172E	82	266	08m43s
-0653-Aug-09	04:33:39	19433	489	-32806	54	T	nn	-0.0821	1.0645	14N	168W	85	212	05m37s
-0652-Feb-02	06:11:21	19425	489	-32800	59	A	p-	0.8500	0.9379	36N	151E	32	429	06m42s
-0652-Jul-28	19:13:30	19418	489	-32794	64	T	p-	-0.8407	1.0166	34S	44W	33	104	01m31s
-0652-Dec-22	23:46:09	19411	488	-32789	31	P	-t	-1.2711	0.4985	66S	77E	0		
-0651-Jan-21	12:14:08	19410	488	-32788	69	P	t-	1.5008	0.0878	63N	43E	0		
-0651-Jun-18	14:02:24	19404	488	-32783	36	P	-t	1.1431	0.7196	67N	133W	0		
-0651-Dec-12	14:28:33	19396	488	-32777	41	T	-p	-0.5745	1.0432	58S	42E	55	177	03m03s
-0650-Jun-07	14:41:48	19389	488	-32771	46	A	-p	0.3892	0.9512	45N	36E	67	194	05m12s
-0650-Dec-02	05:52:25	19381	488	-32765	51	Tm	nn	0.0912	1.0282	16S	171E	85	96	02m47s
-0649-May-27	18:07:49	19373	488	-32759	56	A	p-	-0.3903	0.9884	3S	10W	67	44	01m25s
-0649-Nov-21	17:17:06	19366	487	-32753	61	A	p-	0.8093	0.9690	35N	8E	36	189	03m11s
-0648-Apr-16	20:56:01	19359	487	-32748	28	P	-t	1.4198	0.2131	71N	167W	0		
-0648-May-16	04:42:41	19358	487	-32747	66	P	t-	-1.1280	0.7673	70S	139W	0		
-0648-Oct-11	02:48:27	19352	487	-32742	33	P	-t	-1.4895	0.1354	72S	113E	0		
-0648-Nov-09	21:31:42	19350	487	-32741	71	P	t-	1.5488	0.0337	70N	25W	0		
-0647-Apr-06	13:53:15	19344	487	-32736	38	T	-p	0.6897	1.0689	45N	36E	46	308	05m02s
-0647-Sep-30	02:28:16	19336	487	-32730	43	A	-p	-0.7926	0.9332	49S	160W	37	405	06m26s
-0646-Mar-27	05:32:14	19329	486	-32724	48	T	nn	-0.0400	1.0356	3S	180W	88	120	03m29s
-0646-Sep-19	07:51:29	19321	486	-32718	53	A	nn	-0.0484	0.9916	2N	141E	87	30	00m55s
-0645-Mar-16	15:28:14	19314	486	-32712	58	A	p-	-0.8245	0.9699	56S	58E	34	190	02m29s
-0645-Sep-08	20:26:19	19306	486	-32706	63	T	p-	0.6604	1.0412	48N	30W	48	183	03m06s
-0644-Feb-04	00:45:40	19300	486	-32701	30	P	-t	1.3756	0.3238	69N	134W	0		
-0644-Jul-30	04:24:47	19292	485	-32695	35	P	-t	-1.2373	0.5625	68S	177E	0		
-0644-Aug-28	12:42:29	19291	485	-32694	73	P	t-	1.3367	0.3727	71N	161W	0		

-0643-Jan-23	02:01:22	19284	485	-32689	40	A	-p	0.6455	0.9515	19N	130W	50	232	06m02s
-0643-Jul-19	17:48:12	19277	485	-32683	45	H	-p	-0.5346	1.0080	10S	8W	58	33	00m54s
-0642-Jan-12	10:04:47	19269	485	-32677	50	H	n-	-0.0913	1.0075	28S	112E	85	26	00m45s
-0642-Jul-09	00:21:03	19262	485	-32671	55	A	nn	0.2332	0.9618	37N	106W	76	143	04m14s
-0641-Jan-02	00:07:06	19254	485	-32665	60	T	p-	-0.7668	1.0394	74S	109W	40	207	02m26s
-0641-Jun-28	01:18:03	19246	484	-32659	65	A+	t-	0.9994	0.9629	65N	76E	0		
-0641-Nov-23	04:19:41	19240	484	-32654	32	P	-t	1.2932	0.4584	63N	119W	0		
-0641-Dec-22	15:52:50	19239	484	-32653	70	P	t-	-1.4289	0.2036	65S	138W	0		
-0640-May-17	15:57:19	19232	484	-32648	37	P	-t	-1.0080	0.9750	62S	72E	0		
-0640-Nov-11	13:54:35	19225	484	-32642	42	A	-p	0.6534	0.9563	22N	65E	49	206	04m43s
-0639-May-07	04:22:57	19217	484	-32636	47	T	nn	-0.2018	1.0580	4N	162W	78	195	05m10s
-0639-Oct-31	16:11:48	19210	483	-32630	52	A	nn	-0.0305	0.9222	14S	13E	88	294	09m12s
-0638-Apr-26	21:08:51	19202	483	-32624	57	T	p-	0.5414	1.0768	40N	77W	57	293	05m26s
-0638-Oct-20	15:16:06	19195	483	-32618	62	A	p-	-0.7111	0.9230	46S	1W	44	405	07m08s
-0637-Mar-18	04:22:44	19188	483	-32613	29	P	-t	-1.3208	0.4080	61S	66W	0		
-0637-Apr-16	13:37:59	19187	483	-32612	67	P	t-	1.2971	0.4495	61N	48W	0		
-0637-Sep-10	05:45:53	19181	483	-32607	34	P	-t	1.4245	0.2197	61N	82W	0		
-0637-Oct-09	18:46:16	19179	483	-32606	72	P	t-	-1.3643	0.3357	61S	120W	0		
-0636-Mar-06	12:08:26	19173	482	-32601	39	A	-p	-0.6236	0.9571	41S	105E	51	196	03m54s
-0636-Aug-29	19:55:23	19165	482	-32595	44	T	-p	0.6732	1.0528	48N	12W	47	234	03m36s
-0635-Feb-23	13:12:48	19158	482	-32589	49	A	nn	0.1034	0.9326	7S	63E	84	253	08m05s
-0635-Aug-19	12:29:31	19150	482	-32583	54	T	nn	-0.0346	1.0600	14N	72E	88	197	05m08s
-0634-Feb-12	13:45:07	19143	482	-32577	59	A	p-	0.8145	0.9438	34N	35E	35	348	05m55s
-0634-Aug-09	02:44:51	19135	482	-32571	64	T	p-	-0.7882	1.0117	30S	160W	38	64	01m05s
-0633-Jan-03	08:22:46	19129	481	-32566	31	P	-t	-1.2744	0.4925	65S	64W	0		
-0633-Feb-01	20:22:02	19128	481	-32565	69	P	t-	1.4749	0.1320	63N	90W	0		
-0633-Jun-29	20:31:11	19121	481	-32560	36	P	-t	1.2269	0.5747	66N	118E	0		
-0633-Dec-23	23:19:03	19114	481	-32554	41	T	-p	-0.5776	1.0448	59S	85W	54	184	03m08s
-0632-Jun-17	21:04:15	19106	481	-32548	46	A	-p	0.4761	0.9509	52N	58W	61	205	04m53s
-0632-Dec-12	14:40:05	19098	481	-32542	51	T	nn	0.0905	1.0267	18S	39E	85	91	02m39s
-0631-Jun-07	00:52:23	19091	480	-32536	56	A	p-	-0.3067	0.9920	4N	114W	72	30	00m58s
-0631-Dec-02	01:47:34	19083	480	-32530	61	A	p-	0.8117	0.9662	33N	124W	35	209	03m35s
-0630-Apr-28	04:23:22	19077	480	-32525	28	Pe	-t	1.4831	0.0903	71N	67E	0		

-0630-May-27	11:54:46	19076	480	-32524	66	P	t-	-1.0498	0.9160	69S	100E	0		
-0630-Oct-22	10:37:22	19070	480	-32519	33	P	-t	-1.5038	0.1126	71S	20W	0		
-0630-Nov-21	05:38:35	19068	480	-32518	71	P	t-	1.5479	0.0363	69N	160W	0		
-0629-Apr-17	21:29:40	19062	480	-32513	38	T	-p	0.7546	1.0689	54N	85W	41	341	04m42s
-0629-Oct-11	10:19:21	19054	479	-32507	43	A	-p	-0.8094	0.9323	55S	77E	36	428	06m08s
-0628-Apr-06	13:00:44	19047	479	-32501	48	T	nn	0.0220	1.0349	5N	65E	89	118	03m26s
-0628-Sep-29	15:59:09	19039	479	-32495	53	A	nn	-0.0701	0.9919	4S	17E	86	29	00m52s
-0627-Mar-26	22:38:20	19032	479	-32489	58	A	p-	-0.7675	0.9709	48S	58W	40	162	02m38s
-0627-Sep-19	04:43:53	19024	479	-32483	63	T	p-	0.6316	1.0405	41N	158W	51	174	03m11s
-0626-Feb-14	08:08:28	19018	479	-32478	30	P	-t	1.4102	0.2650	70N	101E	0		
-0626-Mar-16	01:05:22	19017	479	-32477	68	Pb	t-	-1.5404	0.0421	72S	10W	0		
-0626-Aug-10	12:10:24	19010	478	-32472	35	P	-t	-1.2916	0.4593	69S	47E	0		
-0626-Sep-08	20:54:35	19009	478	-32471	73	P	t-	1.3039	0.4355	71N	61E	0		
-0625-Feb-03	09:51:23	19003	478	-32466	40	A	-p	0.6682	0.9567	23N	109E	48	211	05m09s
-0625-Jul-31	01:04:34	18995	478	-32460	45	H	-p	-0.5994	1.0011	16S	120W	53	5	00m07s
-0624-Jan-23	18:26:20	18988	478	-32454	50	H	nn	-0.0755	1.0131	26S	13W	86	45	01m18s
-0624-Jul-19	07:04:09	18980	478	-32448	55	A	nn	0.1593	0.9575	32N	154E	81	157	04m59s
-0623-Jan-12	08:47:22	18973	477	-32442	60	T	p-	-0.7553	1.0428	72S	134E	41	220	02m41s
-0623-Jul-08	07:46:16	18965	477	-32436	65	A	t-	0.9183	0.9375	88N	35E	23	599	04m17s
-0623-Dec-03	13:03:57	18959	477	-32431	32	P	-t	1.2969	0.4517	63N	99E	0		
-0622-Jan-02	00:37:02	18957	477	-32430	70	P	t-	-1.4257	0.2095	66S	79E	0		
-0622-May-28	22:51:03	18951	477	-32425	37	P	-t	-1.0832	0.8401	63S	42W	0		
-0622-Nov-22	22:16:06	18944	477	-32419	42	A	-p	0.6578	0.9530	20N	64W	49	224	05m19s
-0621-May-18	11:41:36	18936	477	-32413	47	T	-n	-0.2763	1.0613	3N	87E	74	209	05m34s
-0621-Nov-12	00:11:54	18929	476	-32407	52	A	nn	-0.0232	0.9202	17S	108W	89	302	09m40s
-0620-May-07	04:36:46	18921	476	-32401	57	T	p-	0.4687	1.0787	40N	173E	62	286	05m40s
-0620-Oct-30	23:15:01	18914	476	-32395	62	A	p-	-0.6999	0.9230	50S	122W	45	400	06m58s
-0619-Mar-28	11:50:48	18907	476	-32390	29	P	-t	-1.3823	0.2954	61S	172E	0		
-0619-Apr-26	21:00:19	18906	476	-32389	67	P	t-	1.2325	0.5718	61N	168W	0		
-0619-Sep-20	13:53:02	18900	476	-32384	34	P	-t	1.4467	0.1795	61N	146E	0		
-0619-Oct-20	03:01:41	18898	476	-32383	72	P	t-	-1.3484	0.3634	61S	106E	0		
-0618-Mar-17	19:17:37	18892	475	-32378	39	A	-p	-0.6819	0.9567	40S	2W	47	211	03m57s
-0618-Sep-10	04:08:40	18885	475	-32372	44	T	-p	0.7055	1.0503	46N	135W	45	232	03m28s

-0617-Mar-06	20:17:09	18877	475	-32366	49	A	nn	0.0515	0.9357	6S	43W	87	240	07m30s
-0617-Aug-30	20:31:57	18870	475	-32360	54	Tm	nn	0.0069	1.0550	12N	49W	90	182	04m39s
-0616-Feb-23	21:11:59	18862	475	-32354	59	A	p-	0.7726	0.9501	33N	79W	39	280	05m06s
-0616-Aug-19	10:22:02	18855	474	-32348	64	H	p-	-0.7413	1.0062	29S	84E	42	31	00m34s
-0615-Jan-13	16:55:01	18848	474	-32343	31	P	-t	-1.2819	0.4787	64S	157E	0		
-0615-Feb-12	04:22:59	18847	474	-32342	69	P	t-	1.4427	0.1882	62N	140E	0		
-0615-Jul-10	03:03:28	18841	474	-32337	36	P	-t	1.3068	0.4375	65N	9E	0		
-0615-Aug-08	17:44:41	18840	474	-32336	74	Pb	t-	-1.5411	0.0311	63S	57W	0		
-0614-Jan-03	08:06:16	18833	474	-32331	41	T	-p	-0.5838	1.0467	59S	149E	54	192	03m13s
-0614-Jun-29	03:30:54	18826	474	-32325	46	A	-p	0.5595	0.9503	58N	150W	56	221	04m37s
-0614-Dec-23	23:25:09	18818	474	-32319	51	T	nn	0.0881	1.0256	19S	93W	85	87	02m32s
-0613-Jun-18	07:40:52	18811	473	-32313	56	A	n-	-0.2252	0.9951	10N	141E	77	18	00m35s
-0613-Dec-13	10:15:34	18803	473	-32307	61	A	p-	0.8131	0.9638	32N	105E	35	225	03m55s
-0612-Jun-06	19:07:46	18796	473	-32301	66	T	t-	-0.9715	1.0379	55S	24W	13	559	02m52s
-0612-Nov-01	18:31:30	18789	473	-32296	33	P	-t	-1.5136	0.0972	71S	153W	0		
-0612-Dec-01	13:44:55	18788	473	-32295	71	P	t-	1.5470	0.0386	68N	65E	0		
-0611-Apr-28	05:01:20	18782	473	-32290	38	T	-p	0.8232	1.0678	64N	153E	34	390	04m16s
-0611-Oct-21	18:17:38	18774	472	-32284	43	A	-p	-0.8209	0.9322	60S	47W	34	443	05m50s
-0610-Apr-17	20:22:40	18767	472	-32278	48	T	nn	0.0886	1.0336	13N	49W	85	114	03m18s
-0610-Oct-11	00:15:26	18759	472	-32272	53	A	nn	-0.0855	0.9925	9S	109W	85	27	00m48s
-0609-Apr-07	05:38:38	18752	472	-32266	58	A	p-	-0.7034	0.9715	39S	170W	45	142	02m49s
-0609-Sep-30	13:09:41	18744	472	-32260	63	T	p-	0.6093	1.0398	36N	73E	52	167	03m16s
-0608-Feb-25	15:21:15	18738	472	-32255	30	P	-t	1.4525	0.1926	71N	21W	0		
-0608-Mar-26	07:52:44	18737	472	-32254	68	P	t-	-1.4782	0.1466	72S	127W	0		
-0608-Aug-20	20:03:12	18731	471	-32249	35	P	-t	-1.3390	0.3700	70S	85W	0		
-0608-Sep-19	05:15:13	18729	471	-32248	73	P	t-	1.2787	0.4835	72N	79W	0		
-0607-Feb-13	17:31:46	18723	471	-32243	40	A	-p	0.6994	0.9620	28N	10W	45	191	04m14s
-0607-Aug-10	08:27:46	18716	471	-32237	45	A	-p	-0.6571	0.9940	23S	125E	49	28	00m39s
-0606-Feb-03	02:40:48	18708	471	-32231	50	T	nn	-0.0534	1.0190	22S	137W	87	65	01m53s
-0606-Jul-30	13:52:08	18701	471	-32225	55	Am	nn	0.0901	0.9530	26N	51E	85	172	05m46s
-0605-Jan-23	17:22:31	18693	470	-32219	60	T	p-	-0.7397	1.0467	68S	13E	42	232	02m59s
-0605-Jul-19	14:19:25	18686	470	-32213	65	A	p-	0.8409	0.9383	80N	54E	32	428	04m40s
-0605-Dec-14	21:47:19	18679	470	-32208	32	P	-t	1.3011	0.4440	64N	42W	0		

-0604-Jan-13	09:16:17	18678	470	-32207	70	P	t-	-1.4189	0.2220	67S	63W	0			
-0604-Jun-08	05:44:54	18672	470	-32202	37	P	-t	-1.1590	0.7030	64S	156W	0			
-0604-Dec-03	06:38:24	18664	470	-32196	42	A	-p	0.6610	0.9504	19N	168E	48	240	05m51s	
-0603-May-28	19:00:11	18657	470	-32190	47	T	-n	-0.3515	1.0637	1N	23W	69	222	05m54s	
-0603-Nov-22	08:13:56	18650	469	-32184	52	Am	nn	-0.0179	0.9188	20S	131E	89	308	10m06s	
-0602-May-18	12:03:53	18642	469	-32178	57	T	p-	0.3954	1.0797	39N	64E	67	279	05m52s	
-0602-Nov-11	07:18:40	18635	469	-32172	62	A	p-	-0.6920	0.9235	54S	117E	46	395	06m47s	
-0601-Apr-08	19:11:39	18628	469	-32167	29	P	-t	-1.4487	0.1741	61S	52E	0			
-0601-May-08	04:18:12	18627	469	-32166	67	P	t-	1.1646	0.6997	62N	72E	0			
-0601-Oct-01	22:08:14	18621	469	-32161	34	P	-t	1.4632	0.1493	61N	13E	0			
-0601-Oct-31	11:23:19	18620	469	-32160	72	P	t-	-1.3368	0.3837	61S	29W	0			
-0600-Mar-28	02:17:49	18613	468	-32155	39	A	-p	-0.7467	0.9559	41S	106W	41	235	04m02s	
-0600-Sep-20	12:30:05	18606	468	-32149	44	T	-p	0.7316	1.0478	43N	98E	43	229	03m21s	

6TH CENTURY BCE

In the 6th century BCE the total number of solar eclipses was 255 solar eclipses: 96 partial solar eclipses, 86 annular solar eclipses (85 central annular solar eclipses with two limits, 0 central annular solar eclipses with one limit, 1 non-central annular solar eclipses with one limit), 65 total solar eclipses (65 central total solar eclipses with two limits, 0 central total solar eclipses with one limit, 0 non-central total solar eclipses with one limit), 8 hybrid solar eclipses.

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°	°	ALT	WIDTH	DUR.
GREATEST			S									°	km	
ECLIPSE														

-0599-Mar-17 03:11:32 18598 468 -32143 49 Am nn -0.0087 0.9387 5S 147W 89 227 07m01s

-0599-Sep-10	04:42:57	18591	468	-32137	54	T	nn	0.0410	1.0501	10N	172W	88	166	04m13s
-0598-Mar-06	04:30:56	18583	468	-32131	59	A	p-	0.7230	0.9565	32N	170E	43	223	04m19s
-0598-Aug-30	18:05:50	18576	467	-32125	64	H	p-	-0.7005	1.0004	28S	34W	45	2	00m02s
-0597-Jan-25	01:20:44	18570	467	-32120	31	P	-t	-1.2955	0.4534	63S	20E	0		
-0597-Feb-23	12:16:26	18569	467	-32119	69	P	t-	1.4033	0.2579	61N	11E	0		
-0597-Jul-21	09:40:41	18562	467	-32114	36	P	-t	1.3822	0.3091	64N	101W	0		
-0597-Aug-20	00:53:28	18561	467	-32113	74	P	t-	-1.4911	0.1200	62S	174W	0		
-0596-Jan-14	16:46:51	18555	467	-32108	41	T	-p	-0.5955	1.0489	58S	24E	53	202	03m21s
-0596-Jul-09	10:02:32	18547	467	-32102	46	A	-p	0.6392	0.9491	62N	120E	50	244	04m26s
-0595-Jan-03	08:04:48	18540	467	-32096	51	T	nn	0.0816	1.0251	19S	137E	85	86	02m28s
-0595-Jun-28	14:34:22	18533	466	-32090	56	A	nn	-0.1468	0.9974	15N	37E	82	9	00m18s
-0595-Dec-23	18:39:15	18525	466	-32084	61	A	p-	0.8115	0.9622	31N	26W	36	235	04m09s
-0594-Jun-18	02:24:08	18518	466	-32078	66	T	t-	-0.8949	1.0440	41S	141W	26	331	03m44s
-0594-Nov-13	02:30:39	18511	466	-32073	33	P	-t	-1.5194	0.0881	70S	73E	0		
-0594-Dec-12	21:50:49	18510	466	-32072	71	P	t-	1.5458	0.0410	67N	69W	0		
-0593-May-09	12:27:46	18504	466	-32067	38	T	-t	0.8960	1.0653	74N	22E	26	487	03m45s
-0593-Nov-02	02:23:34	18496	465	-32061	43	A	-p	-0.8267	0.9325	65S	171W	34	448	05m32s
-0592-Apr-28	03:37:13	18489	465	-32055	48	T	-n	0.1608	1.0317	21N	161W	81	109	03m05s
-0592-Oct-21	08:39:48	18482	465	-32049	53	A	nn	-0.0948	0.9934	14S	123E	84	23	00m42s
-0591-Apr-17	12:30:45	18474	465	-32043	58	A	p-	-0.6331	0.9716	30S	81E	51	130	03m03s
-0591-Oct-10	21:43:31	18467	465	-32037	63	T	p-	0.5935	1.0392	30N	59W	53	162	03m20s
-0590-Mar-07	22:26:56	18461	465	-32032	30	P	-t	1.5003	0.1105	71N	142W	0		
-0590-Apr-06	14:33:48	18459	465	-32031	68	P	t-	-1.4109	0.2604	72S	118E	0		
-0590-Sep-01	04:01:57	18453	464	-32026	35	P	-t	-1.3811	0.2918	71S	142E	0		
-0590-Sep-30	13:41:46	18452	464	-32025	73	P	t-	1.2587	0.5214	72N	139E	0		
-0589-Feb-25	01:06:48	18446	464	-32020	40	A	-p	0.7357	0.9675	34N	129W	42	171	03m23s
-0589-Aug-21	15:56:33	18438	464	-32014	45	A	-p	-0.7090	0.9868	29S	8E	45	66	01m22s
-0588-Feb-14	10:48:02	18431	464	-32008	50	T	nn	-0.0245	1.0251	17S	100E	88	85	02m29s
-0588-Aug-09	20:47:03	18423	464	-32002	55	A	nn	0.0273	0.9484	20N	54W	88	190	06m34s
-0587-Feb-03	01:49:46	18416	463	-31996	60	T	p-	-0.7175	1.0508	63S	111W	44	242	03m21s
-0587-Jul-29	21:01:34	18408	463	-31990	65	A	p-	0.7701	0.9382	71N	43W	39	362	05m06s
-0587-Dec-25	06:25:18	18402	463	-31985	32	P	-t	1.3092	0.4295	65N	177E	0		
-0586-Jan-23	17:47:14	18401	463	-31984	70	P	t-	-1.4062	0.2456	68S	157E	0		

-0586-Jun-19	12:44:42	18395	463	-31979	37	P	-t	-1.2306	0.5727	65S	88E	0		
-0586-Jul-18	23:58:55	18394	463	-31978	75	P	t-	1.4765	0.1352	67N	71E	0		
-0586-Dec-14	14:57:46	18387	463	-31973	42	A	-p	0.6656	0.9484	18N	40E	48	253	06m18s
-0585-Jun-09	02:19:28	18380	463	-31967	47	T	-p	-0.4266	1.0652	2S	134W	65	235	06m10s
-0585-Dec-03	16:16:25	18373	462	-31961	52	A	nn	-0.0133	0.9182	22S	11E	89	311	10m27s
-0584-May-28	19:28:19	18365	462	-31955	57	T	n-	0.3203	1.0798	38N	45W	71	271	06m04s
-0584-Nov-21	15:26:03	18358	462	-31949	62	A	p-	-0.6868	0.9247	58S	4W	46	388	06m34s
-0583-Apr-19	02:22:54	18351	462	-31944	29	Pe	-t	-1.5217	0.0412	61S	65W	0		
-0583-May-18	11:31:07	18350	462	-31943	67	P	t-	1.0935	0.8331	62N	46W	0		
-0583-Oct-12	06:33:18	18344	462	-31938	34	P	-t	1.4726	0.1320	61N	123W	0		
-0583-Nov-10	19:51:24	18343	462	-31937	72	P	t-	-1.3300	0.3954	62S	166W	0		
-0582-Apr-08	09:08:15	18337	461	-31932	39	A	-p	-0.8186	0.9546	42S	153E	35	280	04m09s
-0582-Oct-01	20:58:59	18329	461	-31926	44	T	-p	0.7518	1.0455	41N	31W	41	225	03m16s
-0581-Mar-28	09:58:01	18322	461	-31920	49	A	nn	-0.0755	0.9417	4S	111E	86	216	06m37s
-0581-Sep-21	13:00:56	18314	461	-31914	54	T	nn	0.0688	1.0450	7N	62E	86	150	03m48s
-0580-Mar-16	11:41:42	18307	461	-31908	59	A	p-	0.6659	0.9631	32N	61E	48	174	03m34s
-0580-Sep-10	01:56:47	18300	461	-31902	64	A	p-	-0.6665	0.9945	29S	154W	48	25	00m30s
-0579-Feb-04	09:40:23	18293	460	-31897	31	P	-t	-1.3145	0.4177	62S	116W	0		
-0579-Mar-05	20:03:04	18292	460	-31896	69	P	t-	1.3578	0.3400	61N	115W	0		
-0579-Jul-31	16:23:57	18286	460	-31891	36	P	-t	1.4516	0.1919	63N	147E	0		
-0579-Aug-30	08:09:24	18285	460	-31890	74	P	t-	-1.4473	0.1972	61S	67E	0		
-0578-Jan-25	01:21:45	18279	460	-31885	41	T	-p	-0.6121	1.0512	56S	101W	52	214	03m28s
-0578-Jul-20	16:41:50	18271	460	-31879	46	A	-p	0.7130	0.9476	65N	30E	44	275	04m19s
-0577-Jan-14	16:39:20	18264	460	-31873	51	T	nn	0.0715	1.0248	19S	9E	86	85	02m24s
-0577-Jul-09	21:33:20	18256	459	-31867	56	A	nn	-0.0719	0.9993	19N	68W	86	2	00m04s
-0576-Jan-04	02:57:56	18249	459	-31861	61	A	p-	0.8067	0.9611	30N	155W	36	238	04m17s
-0576-Jun-28	09:44:35	18242	459	-31855	66	T	p-	-0.8207	1.0478	31S	104E	35	279	04m18s
-0576-Nov-23	10:30:50	18235	459	-31850	33	P	-t	-1.5242	0.0806	69S	60W	0		
-0576-Dec-23	05:51:28	18234	459	-31849	71	P	t-	1.5408	0.0495	66N	159E	0		
-0575-May-19	19:52:16	18228	459	-31844	38	T	-t	0.9699	1.0606	79N	160W	13	864	03m06s
-0575-Jun-18	02:27:21	18227	459	-31843	76	Pb	t-	-1.5193	0.0154	67S	144W	0		
-0575-Nov-12	10:34:01	18221	459	-31838	43	A	-p	-0.8297	0.9336	70S	65E	34	446	05m15s
-0574-May-09	10:47:09	18213	458	-31832	48	T	-n	0.2357	1.0291	29N	89E	76	101	02m46s

-0574-Nov-01	17:09:28	18206	458	-31826	53	A	nn	-0.1004	0.9947	18S	6W	84	19	00m33s
-0573-Apr-28	19:15:35	18198	458	-31820	58	A	p-	-0.5576	0.9713	21S	25W	56	123	03m19s
-0573-Oct-22	06:23:58	18191	458	-31814	63	T	p-	0.5831	1.0387	26N	168E	54	159	03m24s
-0572-Mar-18	05:21:32	18185	458	-31809	30	Pe	-t	1.5566	0.0131	72N	99E	0		
-0572-Apr-16	21:05:02	18184	458	-31808	68	P	t-	-1.3355	0.3885	71S	5E	0		
-0572-Sep-11	12:09:17	18178	457	-31803	35	P	-t	-1.4155	0.2287	71S	5E	0		
-0572-Oct-10	22:16:29	18176	457	-31802	73	P	t-	1.2459	0.5454	72N	5W	0		
-0571-Mar-07	08:32:42	18170	457	-31797	40	A	-p	0.7801	0.9728	41N	114E	38	154	02m36s
-0571-Aug-31	23:33:07	18163	457	-31791	45	A	-p	-0.7535	0.9796	36S	112W	41	109	02m01s
-0570-Feb-24	18:47:44	18155	457	-31785	50	T	nn	0.0114	1.0313	11S	22W	89	106	03m04s
-0570-Aug-21	03:49:48	18148	457	-31779	55	A	nn	-0.0285	0.9437	13N	162W	88	208	07m18s
-0569-Feb-14	10:10:13	18141	457	-31773	60	T	p-	-0.6897	1.0551	57S	124E	46	251	03m45s
-0569-Aug-10	03:50:51	18133	456	-31767	65	A	p-	0.7046	0.9375	62N	146W	45	328	05m34s
-0568-Jan-05	15:00:01	18127	456	-31762	32	P	-t	1.3192	0.4112	66N	37E	0		
-0568-Feb-04	02:11:45	18126	456	-31761	70	P	t-	-1.3890	0.2774	69S	18E	0		
-0568-Jun-29	19:48:06	18120	456	-31756	37	P	-t	-1.2997	0.4462	66S	30W	0		
-0568-Jul-29	07:03:33	18118	456	-31755	75	P	t-	1.4083	0.2556	68N	47W	0		
-0568-Dec-24	23:13:17	18112	456	-31750	42	A	-p	0.6724	0.9470	18N	87W	48	263	06m37s
-0567-Jun-19	09:41:41	18105	456	-31744	47	T	-p	-0.4996	1.0659	6S	114E	60	248	06m17s
-0567-Dec-14	00:18:00	18098	455	-31738	52	A	nn	-0.0086	0.9182	24S	110W	89	311	10m42s
-0566-Jun-09	02:53:20	18090	455	-31732	57	T	n-	0.2458	1.0790	36N	154W	76	263	06m15s
-0566-Dec-02	23:34:35	18083	455	-31726	62	A	p-	-0.6821	0.9265	62S	123W	47	377	06m20s
-0565-May-29	18:41:54	18075	455	-31720	67	P	t-	1.0214	0.9673	63N	165W	0		
-0565-Oct-23	15:04:17	18069	455	-31715	34	P	-t	1.4782	0.1215	61N	99E	0		
-0565-Nov-22	04:21:53	18068	455	-31714	72	P	t-	-1.3242	0.4052	63S	56E	0		
-0564-Apr-18	15:50:15	18062	455	-31709	39	A	-t	-0.8964	0.9523	46S	55E	26	382	04m17s
-0564-Oct-12	05:35:12	18055	454	-31703	44	T	-p	0.7663	1.0435	38N	163W	40	221	03m13s
-0563-Apr-07	16:36:57	18047	454	-31697	49	A	nn	-0.1486	0.9445	3S	11E	81	207	06m20s
-0563-Oct-01	21:25:46	18040	454	-31691	54	T	-n	0.0904	1.0402	4N	65W	85	135	03m25s
-0562-Mar-27	18:46:10	18033	454	-31685	59	A	p-	0.6025	0.9695	32N	45W	53	134	02m53s
-0562-Sep-21	09:55:18	18025	454	-31679	64	A	p-	-0.6397	0.9887	31S	84E	50	51	01m00s
-0561-Feb-15	17:51:58	18019	453	-31674	31	P	-t	-1.3407	0.3683	62S	111E	0		
-0561-Mar-17	03:41:52	18018	453	-31673	69	P	t-	1.3049	0.4365	61N	120E	0		

-0561-Aug-11	23:14:18	18012	453	-31668	36	Pe	-t	1.5146	0.0864	62N	34E	0		
-0561-Sep-10	15:33:29	18011	453	-31667	74	P	t-	-1.4103	0.2619	61S	54W	0		
-0560-Feb-05	09:48:28	18004	453	-31662	41	T	-p	-0.6356	1.0536	53S	135E	50	229	03m37s
-0560-Jul-30	23:29:29	17997	453	-31656	46	A	-p	0.7803	0.9457	66N	60W	38	320	04m16s
-0559-Jan-25	01:04:50	17990	453	-31650	51	T	nn	0.0542	1.0248	18S	118W	87	85	02m22s
-0559-Jul-20	04:40:36	17982	453	-31644	56	H	nn	-0.0028	1.0006	22N	175W	90	2	00m04s
-0558-Jan-14	11:09:52	17975	452	-31638	61	A	p-	0.7968	0.9606	29N	78E	37	234	04m19s
-0558-Jul-09	17:09:27	17968	452	-31632	66	T	p-	-0.7495	1.0504	25S	11W	41	252	04m39s
-0558-Dec-04	18:32:32	17962	452	-31627	33	P	-t	-1.5276	0.0749	68S	166E	0		
-0557-Jan-03	13:48:25	17960	452	-31626	71	P	t-	1.5330	0.0624	65N	29E	0		
-0557-May-31	03:14:03	17954	452	-31621	38	P	-t	1.0458	0.9333	68N	42E	0		
-0557-Jun-29	09:55:38	17953	452	-31620	76	P	t-	-1.4504	0.1500	66S	92E	0		
-0557-Nov-23	18:48:38	17947	452	-31615	43	A	-p	-0.8296	0.9354	74S	56W	34	434	04m57s
-0556-May-19	17:51:19	17939	451	-31609	48	T	-p	0.3144	1.0258	37N	19W	71	92	02m22s
-0556-Nov-12	01:45:00	17932	451	-31603	53	A	nn	-0.1018	0.9965	22S	136W	84	12	00m21s
-0555-May-09	01:55:05	17925	451	-31597	58	A	p-	-0.4785	0.9704	13S	130W	61	120	03m38s
-0555-Nov-01	15:09:07	17918	451	-31591	63	T	p-	0.5765	1.0385	21N	33E	55	157	03m30s
-0554-Apr-28	03:32:54	17910	451	-31585	68	P	t-	-1.2570	0.5224	71S	106W	0		
-0554-Sep-22	20:23:23	17904	451	-31580	35	P	-t	-1.4441	0.1772	72S	134W	0		
-0554-Oct-22	06:56:28	17903	451	-31579	73	P	t-	1.2377	0.5607	71N	150W	0		
-0553-Mar-18	15:52:48	17897	450	-31574	40	A	-p	0.8299	0.9779	49N	4W	34	140	01m56s
-0553-Sep-12	07:16:12	17889	450	-31568	45	A	-p	-0.7915	0.9726	43S	127E	37	159	02m33s
-0552-Mar-07	02:40:16	17882	450	-31562	50	Tm	nn	0.0539	1.0374	5S	143W	87	126	03m38s
-0552-Aug-31	11:01:03	17875	450	-31556	55	A	nn	-0.0765	0.9391	7N	88E	86	227	07m59s
-0551-Feb-24	18:21:30	17867	450	-31550	60	T	p-	-0.6544	1.0593	51S	1W	49	257	04m13s
-0551-Aug-20	10:51:12	17860	449	-31544	65	A	p-	0.6479	0.9365	54N	107E	49	310	06m03s
-0550-Jan-15	23:27:00	17854	449	-31539	32	P	-t	1.3346	0.3832	68N	102W	0		
-0550-Feb-14	10:26:55	17853	449	-31538	70	P	t-	-1.3653	0.3217	70S	120W	0		
-0550-Jul-11	02:58:04	17847	449	-31533	37	P	-t	-1.3640	0.3280	67S	149W	0		
-0550-Aug-09	14:17:29	17846	449	-31532	75	P	t-	1.3465	0.3649	69N	169W	0		
-0549-Jan-05	07:22:33	17839	449	-31527	42	A	-p	0.6835	0.9460	20N	147E	47	273	06m47s
-0549-Jun-30	17:07:11	17832	449	-31521	47	T	-p	-0.5699	1.0657	11S	0W	55	261	06m16s
-0549-Dec-25	08:15:21	17825	449	-31515	52	A	nn	-0.0004	0.9189	24S	131E	90	308	10m49s

-0548-Jun-19	10:18:11	17817	448	-31509	57	T	n-	0.1713	1.0772	33N	96E	80	254	06m22s
-0548-Dec-13	07:43:08	17810	448	-31503	62	A	p-	-0.6768	0.9291	64S	120E	47	362	06m05s
-0547-Jun-09	01:50:56	17803	448	-31497	67	T	t-	0.9484	1.0266	76N	118E	18	293	01m28s
-0547-Nov-02	23:41:34	17797	448	-31492	34	P	-t	1.4796	0.1186	62N	40W	0		
-0547-Dec-02	12:54:24	17796	448	-31491	72	P	t-	-1.3195	0.4132	63S	83W	0		
-0546-Apr-29	22:25:37	17789	448	-31486	39	A	-t	-0.9786	0.9481	55S	35W	11	948	04m20s
-0546-Oct-23	14:18:11	17782	448	-31480	44	T	-p	0.7754	1.0418	35N	63E	39	216	03m11s
-0545-Apr-18	23:08:43	17775	447	-31474	49	A	nn	-0.2277	0.9471	3S	87W	77	199	06m07s
-0545-Oct-13	05:57:31	17767	447	-31468	54	T	-n	0.1058	1.0355	0S	165E	84	120	03m04s
-0544-Apr-07	01:44:45	17760	447	-31462	59	A	p-	0.5334	0.9758	32N	149W	58	100	02m15s
-0544-Oct-01	18:00:48	17753	447	-31456	64	A	p-	-0.6192	0.9830	34S	39W	52	75	01m29s
-0543-Feb-26	01:56:32	17747	447	-31451	31	P	-t	-1.3733	0.3062	61S	20W	0		
-0543-Mar-27	11:14:57	17746	447	-31450	69	P	t-	1.2464	0.5447	61N	3W	0		
-0543-Sep-20	23:05:39	17738	446	-31444	74	P	t-	-1.3801	0.3144	61S	177W	0		
-0542-Feb-15	18:08:53	17732	446	-31439	41	T	-p	-0.6646	1.0558	51S	12E	48	245	03m45s
-0542-Aug-11	06:25:17	17725	446	-31433	46	A	-p	0.8416	0.9436	66N	153W	32	384	04m17s
-0541-Feb-05	09:23:40	17718	446	-31427	51	T	nn	0.0318	1.0250	16S	117E	88	85	02m20s
-0541-Jul-31	11:55:50	17710	446	-31421	56	H	nn	0.0609	1.0015	24N	77E	86	5	00m09s
-0540-Jan-25	19:12:39	17703	446	-31415	61	A	p-	0.7803	0.9606	29N	46W	39	225	04m15s
-0540-Jul-20	00:41:07	17696	445	-31409	66	T	p-	-0.6833	1.0520	20S	127W	47	234	04m48s
-0540-Dec-15	02:31:50	17690	445	-31404	33	P	-t	-1.5330	0.0657	67S	34E	0		
-0539-Jan-13	21:37:17	17689	445	-31403	71	P	t-	1.5188	0.0857	64N	99W	0		
-0539-Jun-10	10:36:59	17682	445	-31398	38	P	-t	1.1202	0.7891	67N	82W	0		
-0539-Jul-09	17:29:22	17681	445	-31397	76	P	t-	-1.3860	0.2757	65S	32W	0		
-0539-Dec-04	03:03:18	17675	445	-31392	43	A	-p	-0.8303	0.9378	78S	170W	34	418	04m39s
-0538-May-31	00:54:11	17668	445	-31386	48	T	-p	0.3933	1.0217	44N	125W	67	81	01m55s
-0538-Nov-23	10:23:12	17661	444	-31380	53	A	nn	-0.1020	0.9989	25S	94E	84	4	00m06s
-0537-May-20	08:28:42	17653	444	-31374	58	A	p-	-0.3951	0.9690	5S	128E	67	121	03m58s
-0537-Nov-12	23:59:10	17646	444	-31368	63	T	p-	0.5737	1.0387	18N	102W	55	158	03m36s
-0536-May-08	09:54:27	17639	444	-31362	68	P	t-	-1.1726	0.6668	70S	144E	0		
-0536-Oct-03	04:45:35	17633	444	-31357	35	P	-t	-1.4656	0.1391	72S	85E	0		
-0536-Nov-01	15:42:01	17631	444	-31356	73	P	t-	1.2344	0.5667	71N	64E	0		
-0535-Mar-28	23:04:50	17625	444	-31351	40	A	-p	0.8873	0.9823	58N	123W	27	136	01m23s

-0535-Sep-22	15:07:46	17618	443	-31345	45	A	-p	-0.8217	0.9659	49S	3E	34	214	03m01s
-0534-Mar-18	10:26:04	17611	443	-31339	50	T	nn	0.1028	1.0433	2N	98E	84	145	04m08s
-0534-Sep-11	18:19:45	17604	443	-31333	55	A	nn	-0.1179	0.9346	1N	24W	83	245	08m34s
-0533-Mar-08	02:25:58	17596	443	-31327	60	T	p-	-0.6134	1.0635	44S	125W	52	262	04m44s
-0533-Aug-31	18:00:23	17589	443	-31321	65	A	p-	0.5979	0.9354	47N	3W	53	299	06m34s
-0532-Jan-27	07:46:35	17583	443	-31316	32	P	-t	1.3556	0.3451	69N	120E	0		
-0532-Feb-25	18:32:59	17582	442	-31315	70	P	t-	-1.3349	0.3785	71S	105E	0		
-0532-Jul-21	10:14:32	17576	442	-31310	37	P	-t	-1.4238	0.2178	68S	90E	0		
-0532-Aug-19	21:41:09	17575	442	-31309	75	P	t-	1.2915	0.4622	70N	67E	0		
-0531-Jan-15	15:25:18	17568	442	-31304	42	A	-p	0.6992	0.9455	22N	23E	45	281	06m47s
-0531-Jul-11	00:37:56	17561	442	-31298	47	T	-p	-0.6365	1.0648	16S	116W	50	275	06m05s
-0530-Jan-04	16:07:56	17554	442	-31292	52	A	nn	0.0116	0.9202	23S	13E	89	302	10m50s
-0530-Jun-30	17:46:32	17547	442	-31286	57	T	nn	0.1002	1.0747	30N	15W	84	244	06m24s
-0530-Dec-24	15:49:54	17539	441	-31280	62	A	p-	-0.6694	0.9323	65S	5E	48	342	05m49s
-0529-Jun-20	08:59:21	17532	441	-31274	67	T	p-	0.8756	1.0253	80N	60E	29	180	01m30s
-0529-Nov-14	08:22:52	17526	441	-31269	34	P	-t	1.4785	0.1199	62N	179E	0		
-0529-Dec-13	21:26:46	17525	441	-31268	72	P	t-	-1.3140	0.4225	64S	138E	0		
-0528-May-10	04:55:38	17519	441	-31263	39	P	-t	-1.0639	0.8572	62S	125W	0		
-0528-Nov-02	23:05:27	17512	441	-31257	44	T	-p	0.7811	1.0406	33N	73W	38	213	03m13s
-0527-Apr-29	05:36:04	17504	441	-31251	49	A	np	-0.3105	0.9492	4S	176E	72	195	06m00s
-0527-Oct-23	14:34:53	17497	440	-31245	54	T	-n	0.1158	1.0313	4S	34E	83	106	02m46s
-0526-Apr-18	08:38:55	17490	440	-31239	59	A	p-	0.4595	0.9818	32N	108E	62	72	01m41s
-0526-Oct-13	02:12:01	17483	440	-31233	64	A	p-	-0.6044	0.9777	37S	164W	53	98	01m56s
-0525-Mar-09	09:53:13	17477	440	-31228	31	P	-t	-1.4128	0.2304	61S	149W	0		
-0525-Apr-07	18:41:52	17475	440	-31227	69	P	t-	1.1821	0.6651	61N	124W	0		
-0525-Oct-02	06:46:00	17468	440	-31221	74	P	t-	-1.3566	0.3549	61S	58E	0		
-0524-Feb-27	02:18:48	17462	439	-31216	41	T	-p	-0.7023	1.0578	49S	109W	45	264	03m52s
-0524-Aug-21	13:32:00	17455	439	-31210	46	A	-p	0.8943	0.9412	64N	109E	26	484	04m20s
-0523-Feb-15	17:32:12	17448	439	-31204	51	T	nn	0.0015	1.0252	15S	6W	90	86	02m19s
-0523-Aug-10	19:20:32	17441	439	-31198	56	H	nn	0.1175	1.0020	24N	34W	83	7	00m12s
-0522-Feb-05	03:06:25	17433	439	-31192	61	A	p-	0.7572	0.9610	28N	168W	41	212	04m08s
-0522-Jul-31	08:19:46	17426	439	-31186	66	T	p-	-0.6224	1.0527	17S	117E	51	221	04m49s
-0522-Dec-26	10:29:43	17420	438	-31181	33	P	-t	-1.5393	0.0545	66S	97W	0		

-0521-Jan-25	05:19:46	17419	438	-31180	71	P	t-	1.4998	0.1168	63N	134E	0				
-0521-Jun-21	17:58:34	17413	438	-31175	38	P	-t	1.1950	0.6446	66N	156E	0				
-0521-Jul-21	01:05:53	17412	438	-31174	76	P	t-	-1.3240	0.3962	64S	157W	0				
-0521-Dec-15	11:19:28	17406	438	-31169	43	A	-p	-0.8303	0.9409	80S	84E	34	397	04m20s		
-0520-Jun-10	07:54:17	17398	438	-31163	48	T	-p	0.4736	1.0170	51N	131E	61	66	01m26s		
-0520-Dec-03	19:03:04	17391	438	-31157	53	Hm	nn	-0.1013	1.0019	28S	35W	84	7	00m11s		
-0519-May-30	15:00:22	17384	438	-31151	58	A	pn	-0.3108	0.9671	3N	27E	72	125	04m19s		
-0519-Nov-23	08:51:36	17377	437	-31145	63	T	p-	0.5725	1.0393	15N	122E	55	160	03m44s		
-0518-May-19	16:14:29	17369	437	-31139	68	P	t-	-1.0866	0.8142	69S	36E	0				
-0518-Oct-14	13:12:22	17363	437	-31134	35	P	-t	-1.4829	0.1092	72S	57W	0				
-0518-Nov-13	00:29:48	17362	437	-31133	73	P	t-	1.2336	0.5682	70N	82W	0				
-0517-Apr-09	06:13:07	17356	437	-31128	40	A	-t	0.9483	0.9858	68N	108E	18	161	00m59s		
-0517-Oct-03	23:05:25	17349	437	-31122	45	A	-p	-0.8457	0.9597	55S	123W	32	273	03m23s		
-0516-Mar-28	18:04:41	17342	436	-31116	50	T	nn	0.1582	1.0489	9N	20W	81	164	04m34s		
-0516-Sep-22	01:47:34	17334	436	-31110	55	A	nn	-0.1512	0.9305	6S	138W	81	263	09m04s		
-0515-Mar-18	10:22:10	17327	436	-31104	60	T	p-	-0.5656	1.0673	36S	112E	55	265	05m15s		
-0515-Sep-11	01:20:02	17320	436	-31098	65	A	p-	0.5561	0.9343	39N	116W	56	293	07m03s		
-0514-Feb-06	15:56:32	17314	436	-31093	32	P	-t	1.3835	0.2945	70N	15W	0				
-0514-Mar-08	02:29:51	17313	436	-31092	70	P	t-	-1.2978	0.4479	71S	29W	0				
-0514-Aug-01	17:40:16	17307	436	-31087	37	P	-t	-1.4767	0.1203	69S	34W	0				
-0514-Aug-31	05:15:46	17306	436	-31086	75	P	t-	1.2445	0.5454	71N	61W	0				
-0513-Jan-26	23:18:48	17300	435	-31081	42	A	-p	0.7216	0.9452	26N	99W	44	291	06m38s		
-0513-Jul-22	08:13:47	17292	435	-31075	47	T	-p	-0.6989	1.0630	22S	126E	45	289	05m44s		
-0512-Jan-15	23:53:51	17285	435	-31069	52	A	nn	0.0288	0.9222	21S	103W	88	294	10m41s		
-0512-Jul-11	01:17:57	17278	435	-31063	57	Tm	nn	0.0321	1.0713	25N	128W	88	232	06m21s		
-0511-Jan-03	23:52:24	17271	435	-31057	62	A	p-	-0.6581	0.9362	65S	107W	49	317	05m31s		
-0511-Jun-30	16:09:32	17264	434	-31051	67	T	p-	0.8052	1.0223	77N	9W	36	129	01m26s		
-0511-Nov-24	17:08:00	17258	434	-31046	34	P	-t	1.4747	0.1261	63N	38E	0				
-0511-Dec-24	05:58:28	17256	434	-31045	72	P	t-	-1.3078	0.4332	65S	1W	0				
-0510-May-21	11:21:13	17250	434	-31040	39	P	-t	-1.1517	0.7052	62S	129E	0				
-0510-Nov-14	07:56:59	17243	434	-31034	44	T	-p	0.7835	1.0397	31N	150E	38	211	03m16s		
-0509-May-10	11:59:40	17236	434	-31028	49	A	-p	-0.3964	0.9510	6S	79E	67	194	05m57s		
-0509-Nov-03	23:17:13	17229	434	-31022	54	T	-n	0.1215	1.0275	7S	98W	83	94	02m29s		

-0508-Apr-28	15:29:07	17222	433	-31016	59	A	p-	0.3811	0.9874	32N	7E	67	48	01m11s
-0508-Oct-23	10:29:16	17214	433	-31010	64	A	p-	-0.5951	0.9727	41S	70E	53	120	02m20s
-0507-Mar-19	17:44:01	17209	433	-31005	31	P	-t	-1.4577	0.1434	61S	83E	0		
-0507-Apr-18	02:05:37	17207	433	-31004	69	P	t-	1.1139	0.7939	61N	115E	0		
-0507-Oct-12	14:32:21	17200	433	-30998	74	P	t-	-1.3383	0.3863	61S	68W	0		
-0506-Mar-09	10:22:37	17194	433	-30993	41	T	-p	-0.7452	1.0594	47S	131E	42	288	03m59s
-0506-Sep-01	20:48:43	17187	433	-30987	46	A	-p	0.9394	0.9387	63N	7E	20	663	04m25s
-0505-Feb-27	01:32:04	17180	432	-30981	51	T	nn	-0.0355	1.0254	13S	126W	88	86	02m18s
-0505-Aug-22	02:54:38	17173	432	-30975	56	Hm	nn	0.1672	1.0023	23N	147W	80	8	00m13s
-0504-Feb-16	10:49:55	17165	432	-30969	61	A	p-	0.7263	0.9616	28N	74E	43	197	03m59s
-0504-Aug-10	16:07:03	17158	432	-30963	66	T	p-	-0.5681	1.0528	15S	2W	55	210	04m43s
-0503-Jan-05	18:20:45	17152	432	-30958	33	P	-t	-1.5513	0.0335	65S	134E	0		
-0503-Feb-04	12:51:15	17151	432	-30957	71	P	t-	1.4719	0.1628	62N	11E	0		
-0503-Jul-02	01:24:07	17145	432	-30952	38	P	-t	1.2661	0.5080	65N	33E	0		
-0503-Jul-31	08:50:04	17144	431	-30951	76	P	t-	-1.2682	0.5042	63S	76E	0		
-0503-Dec-25	19:32:43	17138	431	-30946	43	A	-p	-0.8339	0.9446	80S	16W	33	374	03m59s
-0502-Jun-21	14:54:27	17131	431	-30940	48	H	-p	0.5527	1.0116	57N	29E	56	48	00m56s
-0502-Dec-15	03:42:19	17124	431	-30934	53	H	nn	-0.1020	1.0054	29S	164W	84	19	00m32s
-0501-Jun-10	21:29:39	17116	431	-30928	58	A	nn	-0.2248	0.9647	10N	72W	77	131	04m40s
-0501-Dec-04	17:44:39	17109	431	-30922	63	T	p-	0.5718	1.0404	13N	14W	55	165	03m53s
-0500-May-29	22:31:48	17101	430	-30916	68	A-	t-	-0.9976	0.9669	68S	72W	0		
-0500-Oct-24	21:46:07	17093	430	-30911	35	P	-t	-1.4942	0.0905	71S	160E	0		
-0500-Nov-23	09:20:30	17092	430	-30910	73	P	t-	1.2354	0.5648	69N	132E	0		

5TH CENTURY BCE

In the 5th century BCE the total number of solar eclipses was 241 solar eclipses: 84 partial solar eclipses, 78 annular solar eclipses (76 central annular solar eclipses with two limits, 0 central annular solar eclipses with one limit, 2 non-central annular

solar eclipses with one limit), 62 total solar eclipses (62 central total solar eclipses with two limits, 0 central total solar eclipses with one limit, 0 non-central total solar eclipses with one limit), 17 hybrid solar eclipses.

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°	°	ALT	WIDTH	DUR.
	GREATEST		S									°	km	
	ECLIPSE													
-0499-Apr-19	13:16:13	17085	430	-30905	40	P	-t	1.0143	0.9618	71N	66W	0		
-0499-Oct-14	07:09:29	17076	430	-30899	45	A	-p	-0.8636	0.9540	61S	109E	30	333	03m40s
-0498-Apr-09	01:38:19	17067	430	-30893	50	T	-n	0.2185	1.0540	17N	137W	77	183	04m54s
-0498-Oct-03	09:23:33	17059	430	-30887	55	A	nn	-0.1774	0.9266	11S	105E	80	280	09m29s
-0497-Mar-29	18:10:56	17050	429	-30881	60	T	p-	-0.5114	1.0708	28S	10W	59	267	05m47s
-0497-Sep-22	08:49:41	17041	429	-30875	65	A	p-	0.5217	0.9332	33N	128E	58	290	07m32s
-0496-Feb-17	23:57:54	17034	429	-30870	32	P	-t	1.4179	0.2322	70N	149W	0		
-0496-Mar-18	10:17:58	17033	429	-30869	70	P	t-	-1.2541	0.5300	72S	161W	0		
-0496-Aug-12	01:14:27	17025	429	-30864	37	Pe	-t	-1.5236	0.0338	70S	161W	0		
-0496-Sep-10	13:00:35	17024	429	-30863	75	P	t-	1.2047	0.6158	71N	168E	0		
-0495-Feb-06	07:03:08	17017	429	-30858	42	A	-p	0.7508	0.9451	31N	140E	41	305	06m22s
-0495-Aug-01	15:57:11	17008	429	-30852	47	T	-p	-0.7554	1.0607	29S	6E	41	304	05m18s
-0494-Jan-26	07:33:26	16999	428	-30846	52	A	nn	0.0511	0.9245	17S	141E	87	285	10m24s
-0494-Jul-22	08:53:30	16991	428	-30840	57	T	nn	-0.0320	1.0674	20N	118E	88	220	06m11s
-0493-Jan-15	07:50:44	16982	428	-30834	62	A	p-	-0.6426	0.9407	62S	140E	50	288	05m12s
-0493-Jul-11	23:22:01	16973	428	-30828	67	T	p-	0.7377	1.0183	71N	101W	42	93	01m16s
-0493-Dec-06	01:53:00	16966	428	-30823	34	P	-t	1.4720	0.1299	64N	104W	0		
-0492-Jan-04	14:25:34	16965	428	-30822	72	P	t-	-1.2970	0.4522	66S	139W	0		
-0492-May-31	17:44:48	16958	427	-30817	39	P	-t	-1.2402	0.5522	63S	22E	0		
-0492-Nov-24	16:50:00	16949	427	-30811	44	T	-p	0.7849	1.0395	29N	13E	38	211	03m21s
-0491-May-20	18:22:36	16940	427	-30805	49	A	-p	-0.4834	0.9522	9S	17W	61	197	05m58s
-0491-Nov-14	08:01:16	16932	427	-30799	54	T	-n	0.1253	1.0241	10S	130E	83	83	02m15s
-0490-May-09	22:18:12	16923	427	-30793	59	A	p-	0.3006	0.9925	32N	94W	72	28	00m43s
-0490-Nov-03	18:50:46	16915	427	-30787	64	A	p-	-0.5902	0.9682	45S	56W	54	140	02m42s

-0489-Mar-31	01:26:30	16908	426	-30782	31	Pe	-t	-1.5098	0.0422	61S	42W	0			
-0489-Apr-29	09:23:52	16906	426	-30781	69	P	t-	1.0404	0.9339	61N	5W	0			
-0489-Oct-23	22:26:12	16898	426	-30775	74	P	t-	-1.3262	0.4069	61S	163E	0			
-0488-Mar-19	18:16:19	16890	426	-30770	41	T	-p	-0.7963	1.0603	47S	13E	37	321	04m03s	
-0488-Sep-12	04:16:48	16882	426	-30764	46	A	-p	0.9759	0.9359	62N	97W	12	1126	04m30s	
-0487-Mar-09	09:21:11	16873	426	-30758	51	T	nn	-0.0808	1.0253	11S	116E	85	86	02m17s	
-0487-Sep-01	10:39:32	16865	426	-30752	56	H	nn	0.2089	1.0023	22N	96E	78	8	00m13s	
-0486-Feb-26	18:23:51	16856	425	-30746	61	A	p-	0.6882	0.9624	28N	42W	46	183	03m48s	
-0486-Aug-22	00:01:10	16848	425	-30740	66	T	p-	-0.5190	1.0522	14S	122W	59	200	04m33s	
-0485-Jan-17	02:07:51	16841	425	-30735	33	Pe	-t	-1.5665	0.0069	64S	7E	0			
-0485-Feb-15	20:15:21	16839	425	-30734	71	P	t-	1.4381	0.2188	62N	110W	0			
-0485-Jul-13	08:51:16	16832	425	-30729	38	P	-t	1.3355	0.3757	64N	90W	0			
-0485-Aug-11	16:39:19	16831	425	-30728	76	P	t-	-1.2166	0.6033	62S	52W	0			
-0484-Jan-06	03:43:03	16824	425	-30723	43	A	-p	-0.8404	0.9488	77S	121W	32	350	03m38s	
-0484-Jul-01	21:55:19	16815	424	-30717	48	H	-p	0.6302	1.0055	63N	70W	51	25	00m25s	
-0484-Dec-25	12:20:06	16807	424	-30711	53	H	nn	-0.1048	1.0095	30S	67E	84	33	00m55s	
-0483-Jun-21	04:00:22	16798	424	-30705	58	A	nn	-0.1408	0.9618	16N	172W	82	140	04m58s	
-0483-Dec-15	02:36:21	16790	424	-30699	63	T	p-	0.5699	1.0419	12N	150W	55	171	04m03s	
-0482-Jun-10	04:51:36	16781	424	-30693	68	A	t-	-0.9099	0.9417	43S	178E	24	525	06m26s	
-0482-Nov-05	06:23:00	16774	424	-30688	35	P	-t	-1.5026	0.0770	70S	16E	0			
-0482-Dec-04	18:10:49	16773	424	-30687	73	P	t-	1.2375	0.5609	68N	13W	0			
-0481-Apr-30	20:16:22	16766	423	-30682	40	P	-t	1.0835	0.8387	71N	175E	0			
-0481-Oct-25	15:18:47	16757	423	-30676	45	A	-p	-0.8764	0.9489	67S	20W	28	391	03m54s	
-0480-Apr-19	09:07:06	16749	423	-30670	50	T	-n	0.2838	1.0585	25N	108E	73	201	05m07s	
-0480-Oct-13	17:06:56	16740	423	-30664	55	A	nn	-0.1972	0.9234	17S	13W	79	294	09m49s	
-0479-Apr-09	01:53:06	16732	423	-30658	60	T	p-	-0.4516	1.0737	21S	130W	63	267	06m16s	
-0479-Oct-02	16:29:42	16723	423	-30652	65	A	p-	0.4952	0.9324	27N	10E	60	289	07m57s	
-0478-Feb-28	07:49:04	16716	422	-30647	32	P	-t	1.4596	0.1566	71N	78E	0			
-0478-Mar-29	17:57:27	16715	422	-30646	70	P	t-	-1.2041	0.6238	72S	69E	0			
-0478-Sep-21	20:55:23	16707	422	-30640	75	P	t-	1.1722	0.6734	72N	34E	0			
-0477-Feb-17	14:37:08	16700	422	-30635	42	A	-p	0.7876	0.9451	37N	21E	38	326	06m00s	
-0477-Aug-12	23:48:05	16691	422	-30629	47	T	-p	-0.8058	1.0578	36S	118W	36	321	04m46s	

-0476-Feb-06	15:02:41	16683	422	-30623	52	A	nn	0.0819	0.9274	13S	28E	85	274	10m00s
-0476-Aug-01	16:35:09	16674	422	-30617	57	T	nn	-0.0906	1.0627	15N	1E	85	207	05m53s
-0475-Jan-25	15:42:36	16666	421	-30611	62	A	p-	-0.6213	0.9459	58S	26E	51	255	04m52s
-0475-Jul-22	06:38:35	16658	421	-30605	67	T	p-	0.6741	1.0136	64N	156E	47	64	01m00s
-0475-Dec-16	10:38:02	16651	421	-30600	34	P	-t	1.4699	0.1326	65N	113E	0		
-0474-Jan-14	22:49:05	16649	421	-30599	72	P	t-	-1.2827	0.4776	68S	83E	0		
-0474-Jun-12	00:07:47	16642	421	-30594	39	P	-t	-1.3280	0.4009	64S	84W	0		
-0474-Jul-11	14:09:14	16641	421	-30593	77	Pb	t-	1.4888	0.1190	67N	142W	0		
-0474-Dec-06	01:44:32	16634	421	-30588	44	T	-p	0.7853	1.0397	28N	125W	38	213	03m27s
-0473-Jun-01	00:43:33	16625	420	-30582	49	A	-p	-0.5722	0.9530	13S	114W	55	207	05m59s
-0473-Nov-25	16:48:23	16617	420	-30576	54	T	-n	0.1261	1.0213	13S	3W	83	73	02m03s
-0472-May-20	05:06:27	16609	420	-30570	59	A	nn	0.2185	0.9970	31N	165E	77	11	00m17s
-0472-Nov-14	03:14:54	16600	420	-30564	64	A	p-	-0.5882	0.9644	50S	177E	54	158	03m01s
-0471-May-09	16:41:24	16592	420	-30558	69	T	t-	0.9653	1.0386	67N	93W	15	510	02m06s
-0471-Nov-03	06:24:26	16584	420	-30552	74	P	t-	-1.3183	0.4204	62S	34E	0		
-0470-Mar-31	02:04:25	16577	419	-30547	41	T	-p	-0.8521	1.0604	47S	103W	31	371	04m03s
-0470-Sep-23	11:53:48	16569	419	-30541	46	A+	-p	1.0058	0.9518	61N	163E	0		
-0469-Mar-20	17:02:06	16560	419	-30535	51	T	-n	-0.1323	1.0250	9S	0W	82	86	02m15s
-0469-Sep-12	18:34:12	16552	419	-30529	56	H	-n	0.2435	1.0023	19N	23W	76	8	00m13s
-0468-Mar-09	01:45:42	16544	419	-30523	61	A	p-	0.6408	0.9633	28N	154W	50	169	03m39s
-0468-Sep-01	08:05:17	16535	419	-30517	66	T	p-	-0.4777	1.0513	15S	115E	61	191	04m21s
-0467-Feb-26	03:28:22	16527	418	-30511	71	P	t-	1.3951	0.2905	61N	132E	0		
-0467-Jul-23	16:24:07	16520	418	-30506	38	P	-t	1.3996	0.2547	64N	146E	0		
-0467-Aug-22	00:36:35	16519	418	-30505	76	P	t-	-1.1718	0.6887	62S	178E	0		
-0466-Jan-16	11:47:26	16512	418	-30500	43	A	-p	-0.8527	0.9534	74S	127E	31	328	03m16s
-0466-Jul-13	04:59:26	16504	418	-30494	48	A	-p	0.7040	0.9989	66N	166W	45	5	00m05s
-0465-Jan-05	20:53:52	16496	418	-30488	53	H	nn	-0.1115	1.0141	30S	61W	83	49	01m20s
-0465-Jul-02	10:31:19	16487	418	-30482	58	Am	nn	-0.0574	0.9584	21N	90E	87	152	05m16s
-0465-Dec-26	11:26:02	16479	417	-30476	63	T	p-	0.5661	1.0440	11N	75E	55	178	04m14s
-0464-Jun-20	11:12:50	16471	417	-30470	68	A	p-	-0.8225	0.9439	32S	77E	34	365	06m51s
-0464-Nov-15	15:03:20	16464	417	-30465	35	P	-t	-1.5079	0.0690	69S	128W	0		
-0464-Dec-15	02:59:46	16462	417	-30464	73	P	t-	1.2388	0.5584	67N	158W	0		
-0463-May-11	03:14:35	16456	417	-30459	40	P	-t	1.1552	0.7096	70N	56E	0		

-0463-Jun-09	14:14:25	16454	417	-30458	78	Pb	t-	-1.5421	0.0172	67S	39E	0	
-0463-Nov-04	23:33:16	16447	417	-30453	45	A	-p	-0.8846	0.9446	72S	149W	27	442 04m06s
-0462-Apr-30	16:32:12	16439	416	-30447	50	T	-n	0.3528	1.0624	33N	7W	69	218 05m13s
-0462-Oct-25	00:57:03	16431	416	-30441	55	A	nn	-0.2113	0.9206	22S	132W	78	307 10m05s
-0461-Apr-20	09:29:39	16423	416	-30435	60	T	n-	-0.3871	1.0760	13S	112E	67	266 06m42s
-0461-Oct-14	00:18:44	16415	416	-30429	65	A	p-	0.4757	0.9318	21N	110W	61	288 08m20s
-0460-Mar-10	15:30:12	16408	416	-30424	32	Pe	-t	1.5084	0.0681	72N	52W	0	
-0460-Apr-09	01:28:38	16406	416	-30423	70	P	t-	-1.1480	0.7290	72S	59W	0	
-0460-Oct-02	05:00:21	16398	416	-30417	75	P	t-	1.1471	0.7179	72N	103W	0	
-0459-Feb-27	22:01:52	16392	415	-30412	42	A	-p	0.8310	0.9449	44N	96W	33	362 05m35s
-0459-Aug-23	07:46:35	16383	415	-30406	47	T	-p	-0.8501	1.0546	43S	116E	31	341 04m14s
-0458-Feb-16	22:24:36	16375	415	-30400	52	A	nn	0.1186	0.9304	8S	85W	83	262 09m29s
-0458-Aug-13	00:23:04	16367	415	-30394	57	T	-n	-0.1433	1.0577	9N	118W	82	192 05m29s
-0457-Feb-05	23:27:42	16359	415	-30388	62	A	p-	-0.5935	0.9515	53S	89W	53	221 04m29s
-0457-Aug-02	13:59:33	16351	415	-30382	67	H	p-	0.6150	1.0083	57N	48E	52	37 00m39s
-0457-Dec-27	19:20:09	16344	414	-30377	34	P	-t	1.4708	0.1295	66N	29W	0	
-0456-Jan-26	07:05:58	16343	414	-30376	72	P	t-	-1.2622	0.5144	69S	54W	0	
-0456-Jun-22	06:32:25	16336	414	-30371	39	P	-t	-1.4135	0.2544	65S	169E	0	
-0456-Jul-21	20:56:46	16334	414	-30370	77	P	t-	1.4222	0.2364	68N	104E	0	
-0456-Dec-16	10:36:12	16328	414	-30365	44	T	-p	0.7881	1.0403	28N	98E	38	219 03m34s
-0455-Jun-11	07:07:49	16320	414	-30359	49	A	-p	-0.6584	0.9531	18S	148E	49	226 05m58s
-0455-Dec-06	01:34:39	16311	414	-30353	54	T	-n	0.1268	1.0191	15S	135W	83	66 01m53s
-0454-May-31	11:55:16	16303	414	-30347	59	H	nn	0.1356	1.0010	29N	64E	82	4 00m06s
-0454-Nov-25	11:40:16	16295	413	-30341	64	A	p-	-0.5880	0.9611	53S	52E	54	174 03m18s
-0453-May-20	23:56:39	16287	413	-30335	69	T	t-	0.8876	1.0460	69N	176W	27	334 02m40s
-0453-Nov-14	14:26:58	16279	413	-30329	74	P	t-	-1.3136	0.4284	62S	97W	0	
-0452-Apr-10	09:43:22	16272	413	-30324	41	T	-t	-0.9154	1.0592	50S	145E	23	476 03m55s
-0452-Oct-03	19:42:14	16264	413	-30318	46	P	-t	1.0273	0.9150	61N	36E	0	
-0451-Mar-31	00:33:36	16256	412	-30312	51	T	-n	-0.1912	1.0243	8S	114W	79	84 02m12s
-0451-Sep-23	02:38:20	16248	412	-30306	56	H	-n	0.2712	1.0024	16N	145W	74	9 00m13s
-0450-Mar-20	08:58:46	16240	412	-30300	61	A	p-	0.5867	0.9641	29N	96E	54	157 03m31s
-0450-Sep-12	16:17:29	16232	412	-30294	66	T	p-	-0.4427	1.0501	17S	10W	64	184 04m09s
-0449-Mar-09	10:32:18	16224	412	-30288	71	P	t-	1.3447	0.3749	61N	16E	0	

-0449-Aug-04	00:00:48	16217	412	-30283	38	P	-t	1.4599	0.1420	63N	21E	0	
-0449-Sep-02	08:40:36	16216	412	-30282	76	P	t-	-1.1327	0.7622	61S	47E	0	
-0448-Jan-27	19:47:01	16209	411	-30277	43	A	-p	-0.8697	0.9583	71S	13E	29	308 02m53s
-0448-Jul-23	12:07:23	16201	411	-30271	48	A	-p	0.7737	0.9918	68N	100E	39 45	00m35s
-0447-Jan-16	05:22:56	16193	411	-30265	53	T	nn	-0.1231	1.0191	29S	172E	83 66	01m46s
-0447-Jul-12	17:07:27	16185	411	-30259	58	A	nn	0.0213	0.9546	24N	9W	89 166	05m31s
-0446-Jan-05	20:12:08	16177	411	-30253	63	T	p-	0.5590	1.0465	10N	59W	56 186	04m24s
-0446-Jul-01	17:38:12	16169	411	-30247	68	A	p-	-0.7377	0.9451	24S	23W	42 299	07m03s
-0446-Nov-26	23:44:13	16162	410	-30242	35	P	-t	-1.5125	0.0621	69S	88E	0	
-0446-Dec-26	11:45:38	16161	410	-30241	73	P	t-	1.2380	0.5598	66N	59E	0	
-0445-May-22	10:13:03	16154	410	-30236	40	P	-t	1.2276	0.5780	69N	62W	0	
-0445-Jun-20	20:59:27	16153	410	-30235	78	P	t-	-1.4590	0.1641	66S	74W	0	
-0445-Nov-16	07:49:40	16146	410	-30230	45	A	-p	-0.8904	0.9409	77S	82E	27 486	04m15s
-0444-May-10	23:54:50	16138	410	-30224	50	T	-p	0.4245	1.0654	41N	120W	65 236	05m11s
-0444-Nov-04	08:52:23	16130	410	-30218	55	A	nn	-0.2211	0.9185	27S	108E	77 317	10m16s
-0443-Apr-30	17:01:56	16123	410	-30212	60	T	n-	-0.3189	1.0774	5S	5W	71 264	07m01s
-0443-Oct-24	08:14:59	16115	409	-30206	65	A	p-	0.4613	0.9318	16N	128E	62 286	08m38s
-0442-Apr-20	08:52:57	16107	409	-30200	70	P	t-	-1.0867	0.8435	71S	175E	0	
-0442-Oct-13	13:14:28	16099	409	-30194	75	P	t-	1.1286	0.7508	72N	118E	0	
-0441-Mar-11	05:14:03	16092	409	-30189	42	A	-t	0.8841	0.9444	53N	146E	27 436	05m08s
-0441-Sep-03	15:53:54	16084	409	-30183	47	T	-p	-0.8875	1.0509	50S	14W	27 366	03m41s
-0440-Feb-28	05:35:45	16076	409	-30177	52	A	nn	0.1646	0.9337	1S	165E	81 250	08m53s
-0440-Aug-23	08:18:31	16068	408	-30171	57	T	-n	-0.1894	1.0523	3N	120E	79 176	04m59s
-0439-Feb-16	07:04:44	16060	408	-30165	62	A	p-	-0.5580	0.9575	47S	156E	56 186	04m04s
-0439-Aug-12	21:26:55	16052	408	-30159	67	H	p-	0.5619	1.0026	50N	64W	56 11	00m13s
-0438-Jan-07	03:59:52	16046	408	-30154	34	P	-t	1.4743	0.1214	67N	170W	0	
-0438-Feb-05	15:17:50	16044	408	-30153	72	P	t-	-1.2370	0.5605	70S	170E	0	
-0438-Jul-03	12:58:02	16038	408	-30148	39	Pe	-t	-1.4972	0.1116	66S	61E	0	
-0438-Aug-02	03:47:56	16036	408	-30147	77	P	t-	1.3587	0.3473	69N	12W	0	
-0438-Dec-27	19:26:55	16030	408	-30142	44	T	-p	0.7921	1.0413	29N	39W	37 227	03m41s
-0437-Jun-22	13:33:49	16022	407	-30136	49	A	-p	-0.7434	0.9528	24S	49E	42 257	05m53s
-0437-Dec-17	10:19:35	16014	407	-30130	54	H3	-n	0.1285	1.0173	16S	93E	83 60	01m45s
-0436-Jun-10	18:46:41	16006	407	-30124	59	H	nn	0.0538	1.0044	26N	37W	87 15	00m27s

-0436-Dec-05	20:05:23	15998	407	-30118	64	A	p-	-0.5883	0.9584	57S	71W	54	187	03m32s
-0435-May-31	07:13:44	15991	407	-30112	69	T	p-	0.8102	1.0514	69N	94E	36	291	03m07s
-0435-Nov-24	22:29:58	15983	406	-30106	74	P	t-	-1.3095	0.4353	63S	132E	0		
-0434-Apr-21	17:18:26	15976	406	-30101	41	T	-t	-0.9819	1.0556	56S	41E	10	1012	03m29s
-0434-May-21	00:03:00	15975	406	-30100	79	Pb	t-	1.5130	0.0277	63N	113E	0		
-0434-Oct-15	03:38:35	15968	406	-30095	46	P	-t	1.0431	0.8879	61N	93W	0		
-0433-Apr-11	07:56:22	15960	406	-30089	51	T	-n	-0.2565	1.0230	7S	135E	75	81	02m07s
-0433-Oct-04	10:51:59	15953	406	-30083	56	H	-n	0.2918	1.0026	13N	90E	73	9	00m15s
-0432-Mar-30	16:00:59	15945	406	-30077	61	A	p-	0.5245	0.9646	29N	9W	58	147	03m27s
-0432-Sep-23	00:38:46	15937	405	-30071	66	T	n-	-0.4151	1.0489	19S	137W	65	177	03m57s
-0431-Mar-19	17:26:04	15929	405	-30065	71	P	t-	1.2858	0.4742	61N	98W	0		
-0431-Aug-14	07:45:24	15922	405	-30060	38	Pe	-t	1.5134	0.0435	62N	105W	0		
-0431-Sep-12	16:53:32	15921	405	-30059	76	P	t-	-1.1014	0.8206	61S	86W	0		
-0430-Feb-07	03:39:27	15915	405	-30054	43	A	-p	-0.8936	0.9633	67S	102W	26	295	02m30s
-0430-Aug-03	19:19:46	15907	405	-30048	48	A	-p	0.8386	0.9843	68N	6E	33	102	01m04s
-0429-Jan-27	13:46:15	15899	405	-30042	53	T	nn	-0.1403	1.0245	28S	47E	82	84	02m12s
-0429-Jul-23	23:47:27	15891	404	-30036	58	A	nn	0.0965	0.9505	27N	108W	84	182	05m48s
-0428-Jan-17	04:52:12	15883	404	-30030	63	T	p-	0.5467	1.0494	10N	168E	57	195	04m35s
-0428-Jul-12	00:09:13	15876	404	-30024	68	A	p-	-0.6566	0.9456	17S	124W	49	264	07m07s
-0428-Dec-07	08:25:40	15869	404	-30019	35	P	-t	-1.5164	0.0562	67S	55W	0		
-0427-Jan-05	20:27:29	15868	404	-30018	73	P	t-	1.2344	0.5667	65N	83W	0		
-0427-Jun-01	17:12:31	15861	404	-30013	40	P	-t	1.2998	0.4455	68N	180W	0		
-0427-Jul-01	03:49:29	15860	404	-30012	78	P	t-	-1.3785	0.3070	65S	172E	0		
-0427-Nov-26	16:07:24	15854	404	-30007	45	A	-p	-0.8944	0.9379	82S	43W	26	523	04m22s
-0426-May-22	07:16:29	15846	403	-30001	50	T	-p	0.4977	1.0676	49N	128E	60	255	05m04s
-0426-Nov-15	16:52:20	15838	403	-29995	55	A	nn	-0.2268	0.9170	31S	13W	77	324	10m23s
-0425-May-12	00:29:18	15830	403	-29989	60	T	n-	-0.2468	1.0782	2N	120W	76	260	07m12s
-0425-Nov-04	16:18:46	15823	403	-29983	65	A	p-	0.4526	0.9322	12N	4E	63	283	08m50s
-0424-Apr-30	16:11:00	15815	403	-29977	70	P	t-	-1.0209	0.9661	71S	51E	0		
-0424-Oct-23	21:35:41	15807	403	-29971	75	P	t-	1.1151	0.7750	71N	23W	0		
-0423-Mar-21	12:17:43	15801	402	-29966	42	A	-t	0.9432	0.9430	63N	24E	19	639	04m39s
-0423-Sep-14	00:09:26	15793	402	-29960	47	T	-p	-0.9184	1.0473	57S	147W	23	399	03m12s
-0422-Mar-10	12:39:40	15785	402	-29954	52	A	nn	0.2164	0.9371	6N	56E	77	239	08m14s

-0422-Sep-03	16:20:11	15777	402	-29948	57	T	-n	-0.2297	1.0468	3S	3W	77	160	04m26s
-0421-Feb-27	14:34:58	15770	402	-29942	62	A	p-	-0.5162	0.9638	40S	42E	59	152	03m36s
-0421-Aug-24	05:00:45	15762	402	-29936	67	A	p-	0.5153	0.9966	44N	179W	59	14	00m18s
-0420-Jan-18	12:32:47	15755	401	-29931	34	P	-t	1.4837	0.1022	68N	49E	0		
-0420-Feb-16	23:20:52	15754	401	-29930	72	P	t-	-1.2040	0.6212	70S	35E	0		
-0420-Aug-12	10:47:20	15746	401	-29924	77	P	t-	1.3023	0.4448	70N	130W	0		
-0419-Jan-07	04:11:58	15740	401	-29919	44	T	-p	0.8003	1.0426	30N	175W	37	238	03m46s
-0419-Jul-02	20:05:51	15732	401	-29913	49	A	-p	-0.8237	0.9517	32S	53W	34	312	05m43s
-0419-Dec-27	19:00:00	15725	401	-29907	54	H	-n	0.1331	1.0160	16S	38W	82	56	01m39s
-0418-Jun-22	01:42:09	15717	401	-29901	59	H	nn	-0.0255	1.0071	22N	141W	89	25	00m46s
-0418-Dec-17	04:28:00	15709	400	-29895	64	A	p-	-0.5873	0.9564	59S	167E	54	197	03m43s
-0417-Jun-11	14:30:28	15702	400	-29889	69	T	p-	0.7319	1.0555	67N	1E	43	270	03m31s
-0417-Dec-06	06:34:20	15694	400	-29883	74	P	t-	-1.3068	0.4398	64S	0W	0		
-0416-May-02	00:46:45	15688	400	-29878	41	P	-t	-1.0533	0.9183	62S	64W	0		
-0416-May-31	07:27:58	15686	400	-29877	79	P	t-	1.4412	0.1673	63N	9W	0		
-0416-Oct-25	11:43:33	15680	400	-29872	46	P	-t	1.0525	0.8721	61N	136E	0		
-0415-Apr-21	15:11:46	15672	399	-29866	51	T	-p	-0.3270	1.0211	7S	26E	71	76	02m00s
-0415-Oct-14	19:14:35	15665	399	-29860	56	H	-n	0.3055	1.0031	9N	37W	72	11	00m17s
-0414-Apr-10	22:54:58	15657	399	-29854	61	A	p-	0.4560	0.9650	30N	113W	63	140	03m25s
-0414-Oct-04	09:07:33	15649	399	-29848	66	T	n-	-0.3935	1.0475	22S	94E	67	170	03m47s
-0413-Mar-31	00:12:23	15642	399	-29842	71	P	t-	1.2207	0.5847	61N	151E	0		
-0413-Sep-24	01:13:44	15634	399	-29836	76	P	t-	-1.0762	0.8668	61S	139E	0		
-0412-Feb-18	11:24:48	15628	398	-29831	43	A	-p	-0.9241	0.9683	65S	145E	22	298	02m07s
-0412-Aug-14	02:38:44	15620	398	-29825	48	A	-t	0.8972	0.9765	67N	91W	26	190	01m34s
-0411-Feb-06	22:03:34	15613	398	-29819	53	T	nn	-0.1634	1.0300	26S	77W	80	103	02m38s
-0411-Aug-03	06:33:59	15605	398	-29813	58	A	nn	0.1658	0.9464	28N	151E	80	200	06m05s
-0410-Jan-27	13:26:31	15597	398	-29807	63	T	p-	0.5295	1.0525	11N	37E	58	203	04m44s
-0410-Jul-23	06:47:27	15590	398	-29801	68	A	p-	-0.5806	0.9456	13S	134E	54	244	07m03s
-0410-Dec-18	17:03:52	15583	397	-29796	35	P	-t	-1.5223	0.0465	66S	164E	0		
-0409-Jan-17	05:02:22	15582	397	-29795	73	P	t-	1.2258	0.5828	64N	137E	0		
-0409-Jun-13	00:13:51	15576	397	-29790	40	P	-t	1.3712	0.3138	67N	63E	0		
-0409-Jul-12	10:45:40	15575	397	-29789	78	P	t-	-1.3016	0.4442	64S	57E	0		
-0409-Dec-08	00:23:57	15568	397	-29784	45	A	-p	-0.8988	0.9357	86S	156W	26	556	04m27s

-0408-Jun-01	14:38:27	15561	397	-29778	50	T	-p	0.5712	1.0689	56N	18E	55	274	04m51s
-0408-Nov-26	00:52:51	15553	397	-29772	55	A	nn	-0.2322	0.9163	34S	132W	76	327	10m22s
-0407-May-22	07:54:56	15546	397	-29766	60	T	n-	-0.1733	1.0779	9N	126E	80	256	07m13s
-0407-Nov-15	00:27:10	15538	396	-29760	65	A	p-	0.4467	0.9332	9N	120W	63	278	08m55s
-0406-May-11	23:23:05	15531	396	-29754	70	T	t-	-0.9508	1.0249	54S	88W	17	278	01m56s
-0406-Nov-04	06:03:53	15523	396	-29748	75	P	t-	1.1065	0.7907	70N	164W	0		
-0405-Apr-01	19:10:26	15517	396	-29743	42	A+	-t	1.0106	0.9461	72N	139W	0		
-0405-Sep-25	08:33:47	15509	396	-29737	47	T	-p	-0.9422	1.0435	63S	75E	19	439	02m45s
-0404-Mar-20	19:32:47	15502	396	-29731	52	A	nn	0.2774	0.9405	13N	51W	74	229	07m32s
-0404-Sep-14	00:30:31	15494	395	-29725	57	T	-n	-0.2621	1.0412	9S	128W	75	142	03m52s
-0403-Mar-09	21:57:58	15487	395	-29719	62	A	p-	-0.4675	0.9702	33S	72W	62	121	03m04s
-0403-Sep-03	12:40:57	15479	395	-29713	67	A	p-	0.4747	0.9905	37N	64E	61	38	00m54s
-0402-Jan-28	21:01:16	15473	395	-29708	34	P	-t	1.4973	0.0748	69N	91W	0		
-0402-Feb-27	07:18:28	15472	395	-29707	72	P	t-	-1.1657	0.6924	71S	99W	0		
-0402-Aug-23	17:52:49	15464	395	-29701	77	P	t-	1.2511	0.5325	71N	110E	0		
-0401-Jan-18	12:52:31	15458	395	-29696	44	T	-p	0.8127	1.0442	33N	51E	35	253	03m49s
-0401-Jul-14	02:42:32	15450	394	-29690	49	A	-p	-0.9008	0.9499	42S	157W	25	426	05m26s
-0400-Jan-08	03:36:20	15443	394	-29684	54	H	-n	0.1408	1.0152	15S	167W	82	53	01m35s
-0400-Jul-02	08:43:18	15435	394	-29678	59	H	nn	-0.1013	1.0092	18N	113E	84	32	01m01s
-0400-Dec-27	12:45:58	15428	394	-29672	64	A	p-	-0.5831	0.9550	59S	48E	54	203	03m54s

4TH CENTURY BCE

In the 4th century BCE the total number of solar eclipses was 225 solar eclipses: 83 partial solar eclipses, 63 annular solar eclipses (60 central annular solar eclipses with two limits, 2 central annular solar eclipses with one limit, 1 non-central annular solar eclipses with one limit), 56 total solar eclipses (56 central total solar eclipses with two limits, 0 central total solar eclipses with one limit, 0 non-central total solar eclipses with one limit), 23 hybrid solar eclipses.

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°	°	ALT	WIDTH	DUR.
	GREATEST		S									°	km	
	ECLIPSE													
-0399-Jun-21	21:52:02	15420	394	-29666	69	T	p-	0.6568	1.0585	64N	97W	49	256	03m53s
-0399-Dec-16	14:36:23	15413	394	-29660	74	P	t-	-1.3024	0.4469	65S	131W	0		
-0398-May-13	08:12:06	15407	393	-29655	41	P	-t	-1.1270	0.7761	62S	174E	0		
-0398-Jun-11	14:53:36	15405	393	-29654	79	P	t-	1.3698	0.3064	64N	131W	0		
-0398-Nov-05	19:54:17	15399	393	-29649	46	P	-t	1.0580	0.8631	62N	4E	0		
-0397-May-02	22:20:52	15392	393	-29643	51	T	-p	-0.4018	1.0186	8S	82W	66	69	01m49s
-0397-Oct-26	03:44:06	15384	393	-29637	56	H	-n	0.3146	1.0040	6N	167W	72	14	00m23s
-0396-Apr-21	05:40:09	15377	393	-29631	61	A	p-	0.3809	0.9649	30N	147E	67	136	03m29s
-0396-Oct-14	17:44:27	15369	393	-29625	66	T	n-	-0.3783	1.0463	26S	36W	68	165	03m39s
-0395-Apr-10	06:50:56	15362	392	-29619	71	P	t-	1.1486	0.7076	61N	41E	0		
-0395-Oct-04	09:40:58	15355	392	-29613	76	P	t-	-1.0571	0.9011	61S	2E	0		
-0394-Feb-28	19:02:32	15348	392	-29608	43	A	-p	-0.9618	0.9727	63S	38E	15	361	01m46s
-0394-Aug-25	10:04:23	15341	392	-29602	48	A	-t	0.9494	0.9682	65N	169E	18	368	02m04s
-0393-Feb-18	06:12:25	15333	392	-29596	53	T	-n	-0.1942	1.0358	24S	160E	79	123	03m03s
-0393-Aug-14	13:27:17	15326	392	-29590	58	A	nn	0.2291	0.9419	29N	49E	77	220	06m25s
-0392-Feb-07	21:53:00	15319	391	-29584	63	T	p-	0.5058	1.0560	11N	91W	60	212	04m53s
-0392-Aug-02	13:33:51	15311	391	-29578	68	A	p-	-0.5106	0.9452	10S	31E	59	232	06m56s
-0392-Dec-29	01:38:17	15305	391	-29573	35	P	-t	-1.5309	0.0318	65S	24E	0		
-0391-Jan-27	13:30:12	15304	391	-29572	73	P	t-	1.2120	0.6084	63N	0W	0		
-0391-Jun-23	07:19:31	15298	391	-29567	40	P	-t	1.4399	0.1864	66N	55W	0		
-0391-Jul-22	17:49:55	15297	391	-29566	78	P	t-	-1.2297	0.5727	64S	60W	0		
-0391-Dec-18	08:39:11	15290	391	-29561	45	A	-p	-0.9037	0.9339	87S	170E	25	586	04m31s
-0390-Jun-12	22:00:33	15283	391	-29555	50	T	-p	0.6451	1.0693	63N	89W	50	297	04m36s
-0390-Dec-07	08:55:07	15276	390	-29549	55	A	nn	-0.2359	0.9162	36S	108E	76	328	10m16s
-0389-Jun-02	15:18:40	15268	390	-29543	60	T	nn	-0.0981	1.0769	16N	12E	84	250	07m04s
-0389-Nov-26	08:39:02	15261	390	-29537	65	A	p-	0.4430	0.9349	6N	115E	64	270	08m51s
-0388-May-22	06:31:52	15253	390	-29531	70	T	p-	-0.8786	1.0251	42S	154E	28	179	02m12s

-0388-Nov-14	14:36:39	15246	390	-29525	75	P	t-	1.1008	0.8015	70N	54E	0		
-0387-Apr-12	01:56:34	15240	390	-29520	42	P	-t	1.0822	0.8232	72N	105E	0		
-0387-Oct-05	17:04:19	15233	389	-29514	47	T	-p	-0.9611	1.0400	68S	68W	15	499	02m23s
-0386-Apr-01	02:20:19	15225	389	-29508	52	A	-p	0.3431	0.9437	21N	157W	70	220	06m49s
-0386-Sep-25	08:47:32	15218	389	-29502	57	T	-n	-0.2885	1.0357	15S	105E	73	125	03m19s
-0385-Mar-21	05:13:01	15211	389	-29496	62	A	p-	-0.4112	0.9766	25S	176E	66	91	02m29s
-0385-Sep-14	20:28:56	15203	389	-29490	67	A	p-	0.4415	0.9845	31N	56W	64	61	01m32s
-0384-Feb-09	05:21:18	15197	389	-29485	34	Pe	-t	1.5181	0.0335	70N	131E	0		
-0384-Mar-09	15:07:25	15196	389	-29484	72	P	t-	-1.1196	0.7791	72S	129E	0		
-0384-Sep-03	01:07:30	15189	388	-29478	77	P	t-	1.2074	0.6065	71N	13W	0		
-0383-Jan-28	21:24:40	15183	388	-29473	44	T	-p	0.8319	1.0456	37N	82W	33	274	03m49s
-0383-Jul-24	09:28:41	15175	388	-29467	49	A	-t	-0.9704	0.9468	55S	93E	13	842	05m02s
-0382-Jan-18	12:05:36	15168	388	-29461	54	H	-n	0.1536	1.0147	13S	65E	81	51	01m33s
-0382-Jul-13	15:49:54	15161	388	-29455	59	Hm	nn	-0.1734	1.0108	13N	6E	80	38	01m12s
-0381-Jan-07	20:58:39	15153	388	-29449	64	A	p-	-0.5755	0.9542	59S	69W	55	205	04m03s
-0381-Jul-03	05:16:32	15146	387	-29443	69	T	p-	0.5839	1.0606	60N	159E	54	246	04m13s
-0381-Dec-27	22:35:01	15139	387	-29437	74	P	t-	-1.2956	0.4581	66S	98E	0		
-0380-May-23	15:33:30	15133	387	-29432	41	P	-t	-1.2032	0.6291	63S	54E	0		
-0380-Jun-21	22:20:19	15131	387	-29431	79	P	t-	1.2995	0.4432	65N	106E	0		
-0380-Nov-16	04:11:06	15125	387	-29426	46	P	-t	1.0590	0.8619	62N	131W	0		
-0379-May-13	05:24:38	15118	387	-29420	51	H3	-p	-0.4801	1.0155	10S	171E	61	60	01m34s
-0379-Nov-05	12:19:35	15111	387	-29414	56	H	-n	0.3193	1.0052	2N	63E	71	19	00m31s
-0378-May-02	12:19:17	15104	386	-29408	61	A	nn	0.3014	0.9645	29N	48E	72	134	03m37s
-0378-Oct-26	02:27:33	15096	386	-29402	66	T	n-	-0.3682	1.0453	30S	168W	68	161	03m32s
-0377-Apr-21	13:22:04	15089	386	-29396	71	P	t-	1.0700	0.8420	61N	66W	0		
-0377-Oct-15	18:14:54	15082	386	-29390	76	P	t-	-1.0439	0.9241	61S	136W	0		
-0376-Mar-11	02:33:33	15076	386	-29385	43	P	-t	-1.0056	0.9729	61S	52W	0		
-0376-Sep-04	17:36:59	15068	386	-29379	48	An	-t	0.9949	0.9584	62N	77E	4	-	02m34s
-0375-Feb-28	14:14:47	15061	385	-29373	53	T	-n	-0.2311	1.0415	22S	40E	77	142	03m28s
-0375-Aug-24	20:29:02	15054	385	-29367	58	A	nn	0.2849	0.9376	28N	56W	73	241	06m47s
-0374-Feb-18	06:12:26	15047	385	-29361	63	T	p-	0.4762	1.0594	12N	142E	61	220	05m02s
-0374-Aug-13	20:28:32	15040	385	-29355	68	A	p-	-0.4467	0.9446	8S	74W	63	226	06m47s
-0373-Jan-09	10:06:57	15034	385	-29350	35	Pe	-t	-1.5437	0.0095	64S	115W	0		

-0373-Feb-07	21:49:46	15032	385	-29349	73	P	t-	1.1922	0.6454	62N	135W	0			
-0373-Jul-04	14:30:17	15026	385	-29344	40	Pe	-t	1.5053	0.0646	65N	175W	0			
-0373-Aug-03	01:02:56	15025	385	-29343	78	P	t-	-1.1637	0.6911	63S	179W	0			
-0373-Dec-29	16:48:16	15019	384	-29338	45	A	-p	-0.9132	0.9327	83S	81E	24	628	04m33s	
-0372-Jun-23	05:26:14	15012	384	-29332	50	T	-p	0.7164	1.0686	70N	167E	44	322	04m17s	
-0372-Dec-17	16:54:47	15005	384	-29326	55	A	nn	-0.2423	0.9169	38S	10W	76	326	10m02s	
-0371-Jun-12	22:42:42	14998	384	-29320	60	Tm	nn	-0.0235	1.0749	22N	100W	89	243	06m46s	
-0371-Dec-06	16:51:37	14990	384	-29314	65	A	p-	0.4392	0.9372	4N	11W	64	260	08m35s	
-0370-Jun-02	13:37:28	14983	384	-29308	70	T	p-	-0.8042	1.0237	32S	41E	36	136	02m17s	
-0370-Nov-25	23:12:59	14976	383	-29302	75	P	t-	1.0975	0.8082	69N	89W	0			
-0369-Apr-23	08:32:18	14970	383	-29297	42	P	-t	1.1613	0.6872	71N	9W	0			
-0369-Oct-17	01:43:12	14963	383	-29291	47	T	-t	-0.9733	1.0368	73S	142E	12	569	02m04s	
-0368-Apr-11	08:59:26	14956	383	-29285	52	A	-p	0.4159	0.9467	30N	100E	65	215	06m06s	
-0368-Oct-05	17:11:56	14948	383	-29279	57	T	-n	-0.3082	1.0304	20S	24W	72	108	02m48s	
-0367-Mar-31	12:22:31	14941	383	-29273	62	A	p-	-0.3493	0.9830	17S	64E	69	64	01m52s	
-0367-Sep-25	04:24:19	14934	382	-29267	67	A	n-	0.4151	0.9786	25N	177W	65	83	02m14s	
-0366-Mar-20	22:50:52	14927	382	-29261	72	P	t-	-1.0683	0.8766	72S	2W	0			
-0366-Sep-14	08:29:17	14920	382	-29255	77	P	t-	1.1698	0.6695	72N	139W	0			
-0365-Feb-09	05:51:07	14914	382	-29250	44	T	-p	0.8558	1.0471	41N	145E	31	302	03m45s	
-0365-Aug-04	16:22:33	14907	382	-29244	49	P	-t	-1.0340	0.9078	69S	28W	0			
-0364-Jan-29	20:27:12	14900	382	-29238	54	H	-n	0.1720	1.0144	10S	62W	80	50	01m31s	
-0364-Jul-23	23:05:14	14893	381	-29232	59	H	nn	-0.2389	1.0118	8N	105W	76	42	01m19s	
-0363-Jan-18	05:04:25	14885	381	-29226	64	A	p-	-0.5633	0.9538	56S	174E	55	205	04m11s	
-0363-Jul-13	12:46:54	14878	381	-29220	69	T	p-	0.5152	1.0618	54N	51E	59	237	04m30s	
-0362-Jan-07	06:28:02	14871	381	-29214	74	P	t-	-1.2845	0.4764	67S	32W	0			
-0362-Jun-03	22:54:17	14865	381	-29209	41	P	-t	-1.2793	0.4829	64S	67W	0			
-0362-Jul-03	05:50:06	14864	381	-29208	79	P	t-	1.2320	0.5742	66N	18W	0			
-0362-Nov-27	12:30:04	14858	381	-29203	46	P	-t	1.0591	0.8626	63N	94E	0			
-0361-May-24	12:23:33	14851	380	-29197	51	H	-p	-0.5614	1.0115	13S	65E	56	47	01m12s	
-0361-Nov-16	20:59:20	14844	380	-29191	56	H	-n	0.3212	1.0071	0S	69W	71	26	00m42s	
-0360-May-12	18:52:38	14837	380	-29185	61	A	nn	0.2179	0.9636	29N	49W	77	135	03m52s	
-0360-Nov-05	11:14:53	14830	380	-29179	66	T	n-	-0.3616	1.0446	34S	60E	69	159	03m28s	
-0359-May-01	19:48:42	14823	380	-29173	71	An	t-	0.9873	0.9357	65N	156W	8	-	04m13s	

-0359-Oct-26	02:54:47	14816	380	-29167	76	P	t-	-1.0364	0.9366	61S	84E	0		
-0358-Mar-22	09:57:00	14810	379	-29162	43	P	-t	-1.0563	0.8848	61S	173W	0		
-0358-Sep-16	01:17:02	14803	379	-29156	48	P	-t	1.0332	0.9134	61N	40W	0		
-0357-Mar-11	22:08:58	14796	379	-29150	53	T	-n	-0.2754	1.0471	20S	79W	74	162	03m53s
-0357-Sep-05	03:39:41	14788	379	-29144	58	A	-p	0.3332	0.9333	26N	163W	70	262	07m13s
-0356-Feb-29	14:22:38	14781	379	-29138	63	T	n-	0.4388	1.0628	14N	18E	64	227	05m11s
-0356-Aug-24	03:34:05	14774	379	-29132	68	A	p-	-0.3909	0.9437	8S	179E	67	224	06m39s
-0355-Feb-18	06:01:17	14767	378	-29126	73	P	t-	1.1662	0.6937	62N	92E	0		
-0355-Aug-13	08:24:24	14760	378	-29120	78	P	t-	-1.1032	0.7994	62S	60E	0		
-0354-Jan-09	00:52:54	14754	378	-29115	45	A	-t	-0.9255	0.9319	79S	36W	22	685	04m34s
-0354-Jul-04	12:54:42	14747	378	-29109	50	T	-p	0.7858	1.0671	74N	71E	38	357	03m58s
-0354-Dec-29	00:51:57	14740	378	-29103	55	A	nn	-0.2504	0.9182	38S	128W	75	321	09m42s
-0353-Jun-24	06:06:56	14733	378	-29097	60	T	nn	0.0504	1.0721	27N	149E	87	235	06m22s
-0353-Dec-18	01:04:21	14726	377	-29091	65	A	p-	0.4348	0.9402	2N	136W	64	246	08m07s
-0352-Jun-12	20:42:40	14719	377	-29085	70	T	p-	-0.7304	1.0213	24S	70W	43	106	02m11s
-0352-Dec-06	07:49:26	14712	377	-29079	75	P	t-	1.0935	0.8163	68N	130E	0		
-0351-May-03	15:04:18	14706	377	-29074	42	P	-t	1.2424	0.5477	70N	121W	0		
-0351-Oct-27	10:27:06	14699	377	-29068	47	T	-t	-0.9818	1.0341	75S	13W	10	661	01m50s
-0350-Apr-22	15:33:43	14692	377	-29062	52	A	-p	0.4930	0.9494	39N	3W	60	213	05m25s
-0350-Oct-17	01:42:08	14685	376	-29056	57	T	-n	-0.3225	1.0254	26S	153W	71	91	02m19s
-0349-Apr-11	19:26:13	14678	376	-29050	62	A	p-	-0.2813	0.9891	9S	45W	74	40	01m13s
-0349-Oct-06	12:26:56	14671	376	-29044	67	A	n-	0.3956	0.9730	19N	60E	67	105	02m56s
-0348-Mar-31	06:26:35	14664	376	-29038	72	P	t-	-1.0097	0.9886	72S	131W	0		
-0348-Sep-24	16:00:52	14657	376	-29032	77	P	t-	1.1403	0.7183	72N	93E	0		
-0347-Feb-19	14:08:15	14652	376	-29027	44	T	-p	0.8871	1.0481	48N	14E	27	346	03m36s
-0347-Aug-14	23:26:11	14645	375	-29021	49	P	-t	-1.0901	0.8108	70S	147W	0		
-0346-Feb-09	04:39:56	14638	375	-29015	54	H	-n	0.1972	1.0142	5S	173E	79	50	01m30s
-0346-Aug-04	06:28:13	14631	375	-29009	59	H	-n	-0.2988	1.0123	2N	142E	73	44	01m22s
-0345-Jan-29	13:00:38	14624	375	-29003	64	A	p-	-0.5437	0.9540	52S	58E	57	201	04m18s
-0345-Jul-24	20:22:19	14617	375	-28997	69	T	p-	0.4504	1.0621	48N	61W	63	229	04m44s
-0344-Jan-18	14:14:43	14610	375	-28991	74	P	t-	-1.2683	0.5033	68S	161W	0		
-0344-Jun-14	06:13:55	14604	374	-28986	41	P	-t	-1.3556	0.3369	65S	172E	0		
-0344-Jul-13	13:23:18	14603	374	-28985	79	P	t-	1.1672	0.6990	67N	143W	0		

-0344-Dec-07	20:50:38	14597	374	-28980	46	P	-t	1.0586	0.8643	64N	41W	0		
-0343-Jun-03	19:20:06	14590	374	-28974	51	H	-p	-0.6435	1.0069	17S	41W	50	31	00m44s
-0343-Nov-27	05:42:28	14583	374	-28968	56	H	-n	0.3208	1.0094	3S	159E	71	34	00m57s
-0342-May-24	01:21:15	14576	374	-28962	61	Am	nn	0.1310	0.9622	27N	144W	82	138	04m13s
-0342-Nov-16	20:06:37	14569	374	-28956	66	T	n-	-0.3585	1.0443	38S	73W	69	158	03m26s
-0341-May-13	02:11:33	14563	373	-28950	71	A	t-	0.9012	0.9417	67N	142E	25	497	04m15s
-0341-Nov-06	11:38:45	14556	373	-28944	76	P	t-	-1.0325	0.9423	62S	57W	0		
-0340-Apr-01	17:14:56	14550	373	-28939	43	P	-t	-1.1125	0.7857	61S	68E	0		
-0340-Sep-26	09:04:31	14543	373	-28933	48	P	-t	1.0648	0.8564	61N	166W	0		
-0339-Mar-22	05:57:49	14536	373	-28927	53	T	-n	-0.3251	1.0523	18S	163E	71	182	04m17s
-0339-Sep-15	10:57:56	14529	373	-28921	58	A	-p	0.3751	0.9293	24N	87E	68	283	07m41s
-0338-Mar-11	22:25:58	14522	372	-28915	63	T	n-	0.3956	1.0660	15N	104W	67	233	05m19s
-0338-Sep-04	10:49:16	14515	372	-28909	68	A	p-	-0.3422	0.9427	9S	69E	70	223	06m33s
-0337-Mar-01	14:02:01	14508	372	-28903	73	P	t-	1.1322	0.7570	61N	38W	0		
-0337-Aug-24	15:56:29	14502	372	-28897	78	P	t-	-1.0504	0.8941	61S	63W	0		
-0336-Jan-20	08:48:34	14496	372	-28892	45	A	-t	-0.9447	0.9312	74S	151W	19	802	04m33s
-0336-Jul-14	20:29:12	14489	372	-28886	50	T	-p	0.8503	1.0646	76N	17W	31	405	03m38s
-0335-Jan-08	08:42:27	14482	372	-28880	55	A	nn	-0.2642	0.9201	38S	116E	74	314	09m16s
-0335-Jul-04	13:34:34	14475	371	-28874	60	T	nn	0.1212	1.0685	31N	37E	83	225	05m53s
-0335-Dec-28	09:14:52	14468	371	-28868	65	A	p-	0.4278	0.9439	1N	100E	65	229	07m28s
-0334-Jun-24	03:46:24	14462	371	-28862	70	T	p-	-0.6561	1.0179	17S	180E	49	81	01m55s
-0334-Dec-17	16:26:52	14455	371	-28856	75	P	t-	1.0897	0.8245	66N	12W	0		
-0333-May-14	21:29:29	14449	371	-28851	42	P	-t	1.3283	0.4000	70N	129E	0		
-0333-Jun-13	11:20:32	14448	371	-28850	80	Pb	t-	-1.4809	0.1317	67S	70E	0		
-0333-Nov-07	19:16:35	14442	371	-28845	47	T	-t	-0.9859	1.0321	76S	169W	9	732	01m39s
-0332-May-02	22:02:53	14435	370	-28839	52	A	-p	0.5745	0.9516	48N	104W	55	216	04m47s
-0332-Oct-27	10:18:48	14428	370	-28833	57	T	-n	-0.3311	1.0209	30S	77E	70	75	01m53s
-0331-Apr-22	02:26:26	14422	370	-28827	62	A	nn	-0.2096	0.9949	1S	154W	78	18	00m35s
-0331-Oct-16	20:35:07	14415	370	-28821	67	A	n-	0.3815	0.9677	14N	65W	67	125	03m40s
-0330-Apr-11	13:58:08	14408	370	-28815	72	T	t-	-0.9469	1.0360	60S	65E	18	381	02m28s
-0330-Oct-05	23:39:29	14401	370	-28809	77	P	t-	1.1169	0.7566	72N	37W	0		
-0329-Mar-02	22:17:20	14395	369	-28804	44	T	-t	0.9251	1.0486	55N	118W	22	427	03m22s
-0329-Aug-26	06:39:28	14389	369	-28798	49	P	-t	-1.1387	0.7266	71S	90E	0		

-0328-Feb-20	12:43:47	14382	369	-28792	54	H	-n	0.2289	1.0141	0N	50E	77	50	01m29s
-0328-Aug-14	14:00:37	14375	369	-28786	59	H	-n	-0.3517	1.0126	4S	26E	69	46	01m22s
-0327-Feb-08	20:47:42	14368	369	-28780	64	A	p-	-0.5176	0.9544	47S	59W	59	195	04m27s
-0327-Aug-04	04:05:45	14361	369	-28774	69	T	p-	0.3919	1.0618	42N	176W	67	221	04m54s
-0326-Jan-28	21:53:27	14355	368	-28768	74	P	t-	-1.2459	0.5406	69S	72E	0		
-0326-Jun-25	13:34:15	14349	368	-28763	41	P	-t	-1.4305	0.1946	65S	51E	0		
-0326-Jul-24	21:00:51	14348	368	-28762	79	P	t-	1.1065	0.8152	68N	91E	0		
-0326-Dec-19	05:10:20	14342	368	-28757	46	P	-t	1.0593	0.8643	65N	177W	0		
-0325-Jun-15	02:15:17	14335	368	-28751	51	H	-p	-0.7252	1.0014	23S	147W	43	7	00m09s
-0325-Dec-08	14:25:22	14329	368	-28745	56	H	-n	0.3211	1.0123	4S	27E	71	45	01m16s
-0324-Jun-03	07:48:06	14322	368	-28739	61	A	nn	0.0436	0.9603	24N	120E	87	144	04m41s
-0324-Nov-27	04:59:59	14315	367	-28733	66	T	n-	-0.3571	1.0445	41S	154E	69	159	03m28s
-0323-May-23	08:32:27	14308	367	-28727	71	A	p-	0.8128	0.9454	67N	66E	35	345	04m14s
-0323-Nov-16	20:25:34	14302	367	-28721	76	P	t-	-1.0317	0.9424	62S	162E	0		
-0322-Apr-13	00:27:14	14296	367	-28716	43	P	-t	-1.1737	0.6759	61S	50W	0		
-0322-May-12	11:40:49	14295	367	-28715	81	Pb	t-	1.5330	0.0335	62N	62W	0		
-0322-Oct-07	16:59:26	14289	367	-28710	48	P	-t	1.0893	0.8122	61N	65E	0		
-0321-Apr-02	13:38:00	14282	367	-28704	53	T	-n	-0.3824	1.0571	17S	47E	67	202	04m41s
-0321-Sep-26	18:26:05	14276	366	-28698	58	A	-p	0.4083	0.9256	22N	26W	66	303	08m14s
-0320-Mar-22	06:20:40	14269	366	-28692	63	T	n-	0.3453	1.0689	16N	136E	70	238	05m28s
-0320-Sep-14	18:14:55	14262	366	-28686	68	A	p-	-0.3017	0.9418	10S	44W	72	224	06m29s
-0319-Mar-11	21:54:32	14256	366	-28680	73	P	t-	1.0924	0.8312	61N	166W	0		
-0319-Sep-03	23:38:28	14249	366	-28674	78	P	t-	-1.0050	0.9755	61S	172E	0		
-0318-Jan-30	16:37:15	14243	366	-28669	45	A	-t	-0.9687	0.9305	70S	96E	14	1089	04m31s
-0318-Jul-26	04:07:41	14236	365	-28663	50	T	-t	0.9117	1.0610	74N	106W	24	494	03m17s
-0317-Jan-19	16:28:16	14230	365	-28657	55	A	-n	-0.2818	0.9225	37S	2E	73	305	08m47s
-0317-Jul-15	21:05:15	14223	365	-28651	60	T	-n	0.1889	1.0642	33N	74W	79	214	05m21s
-0316-Jan-08	17:21:21	14216	365	-28645	65	A	p-	0.4166	0.9482	1N	23W	65	209	06m41s
-0316-Jul-04	10:52:54	14210	365	-28639	70	H3	p-	-0.5848	1.0137	12S	70E	54	58	01m30s
-0316-Dec-28	01:01:38	14203	365	-28633	75	P	t-	1.0828	0.8384	65N	152W	0		
-0315-May-25	03:52:52	14197	365	-28628	42	P	-t	1.4144	0.2523	69N	20E	0		
-0315-Jun-23	17:54:54	14196	364	-28627	80	P	t-	-1.4038	0.2675	66S	40W	0		
-0315-Nov-18	04:07:57	14191	364	-28622	47	T	-t	-0.9885	1.0306	76S	36E	7	802	01m32s

-0314-May-14	04:30:09	14184	364	-28616	52	A	-p	0.6580	0.9534	57N	156E	49	227	04m13s
-0314-Nov-07	18:58:42	14177	364	-28610	57	H3	-n	-0.3362	1.0168	35S	54W	70	61	01m30s
-0313-May-03	09:22:02	14171	364	-28604	62	H	nn	-0.1331	1.0002	7N	99E	82	1	00m02s
-0313-Oct-28	04:48:42	14164	364	-28598	67	A	n-	0.3728	0.9630	10N	169E	68	144	04m22s
-0312-Apr-21	21:24:20	14157	364	-28592	72	T	t-	-0.8789	1.0438	49S	62W	28	306	03m20s
-0312-Oct-16	07:25:04	14151	363	-28586	77	P	t-	1.0995	0.7847	72N	168W	0		
-0311-Mar-13	06:17:17	14145	363	-28581	44	T	-t	0.9702	1.0476	65N	104E	13	679	02m58s
-0311-Sep-05	14:03:51	14138	363	-28575	49	P	-t	-1.1789	0.6571	71S	35W	0		
-0310-Mar-02	20:37:03	14132	363	-28569	54	H	-n	0.2686	1.0139	6N	71W	74	49	01m26s
-0310-Aug-25	21:41:51	14125	363	-28563	59	H	-n	-0.3980	1.0124	10S	92W	66	47	01m18s
-0309-Feb-20	04:24:19	14118	363	-28557	64	A	p-	-0.4835	0.9551	41S	174W	61	186	04m34s
-0309-Aug-15	11:56:28	14112	362	-28551	69	T	n-	0.3395	1.0609	36N	65E	70	212	05m00s
-0308-Feb-09	05:23:02	14105	362	-28545	74	P	t-	-1.2162	0.5903	70S	54W	0		
-0308-Jul-05	20:56:42	14100	362	-28540	41	Pe	-t	-1.5026	0.0589	66S	71W	0		
-0308-Aug-04	04:44:31	14098	362	-28539	79	P	t-	1.0513	0.9199	69N	38W	0		
-0308-Dec-29	13:28:55	14093	362	-28534	46	P	-t	1.0613	0.8624	66N	47E	0		
-0307-Jun-25	09:09:50	14086	362	-28528	51	A	-p	-0.8062	0.9953	30S	106E	36	28	00m30s
-0307-Dec-18	23:08:34	14080	362	-28522	56	H	-n	0.3216	1.0156	5S	106W	71	57	01m38s
-0306-Jun-14	14:13:42	14073	361	-28516	61	A	nn	-0.0440	0.9579	21N	24E	88	153	05m14s
-0306-Dec-08	13:53:58	14066	361	-28510	66	T	n-	-0.3560	1.0452	43S	23E	69	161	03m31s
-0305-Jun-03	14:52:37	14060	361	-28504	71	A	p-	0.7230	0.9481	65N	13W	43	276	04m17s
-0305-Nov-28	05:13:47	14053	361	-28498	76	P	t-	-1.0325	0.9397	63S	19E	0		
-0304-Apr-23	07:36:42	14048	361	-28493	43	P	-t	-1.2381	0.5591	61S	167W	0		
-0304-May-22	18:26:14	14047	361	-28492	81	P	t-	1.4498	0.1802	63N	174W	0		
-0304-Oct-18	00:59:16	14041	361	-28487	48	P	-t	1.1090	0.7768	61N	64W	0		
-0303-Apr-12	21:14:42	14035	360	-28481	53	T	-p	-0.4433	1.0614	16S	67W	64	222	05m04s
-0303-Oct-07	02:01:51	14028	360	-28475	58	A	-p	0.4350	0.9223	19N	141W	64	321	08m49s
-0302-Apr-02	14:08:11	14021	360	-28469	63	T	n-	0.2891	1.0713	18N	19E	73	241	05m37s
-0302-Sep-26	01:50:36	14015	360	-28463	68	A	n-	-0.2688	0.9411	13S	159W	74	225	06m26s
-0301-Mar-23	05:36:53	14008	360	-28457	73	P	t-	1.0449	0.9193	61N	68E	0		
-0301-Sep-15	07:31:24	14002	360	-28451	78	A	t-	-0.9675	0.9823	56S	69E	14	249	01m16s
-0300-Feb-11	00:14:01	13996	360	-28446	45	A-	-t	-1.0019	0.9562	62S	1E	0		
-0300-Aug-05	11:54:44	13990	359	-28440	50	T	-t	0.9663	1.0562	70N	160E	14	747	02m52s

3RD CENTURY BCE

In the 3rd century BCE the total number of solar eclipses was 226 solar eclipses: 83 partial solar eclipses, 62 annular solar eclipses (60 central annular solar eclipses with two limits, 1 central annular solar eclipses with one limit, 1 non-central annular solar eclipses with one limit), 57 total solar eclipses (53 central total solar eclipses with two limits, 2 central total solar eclipses with one limit, 2 non-central total solar eclipses with one limit), 24 hybrid solar eclipses.

CALENDAR	TD	ΔT	ΔT	LUNA	SAROS	ECL.	QLE	GAMMA	ECL.	LAT	LONG	SUN	PATH	CENTRAL
DATE	OF	s	SIGMA	NUM	NUM	TYPE			MAG	°	°	ALT	WIDTH	DUR.
GREATEST			S									°	km	
ECLIPSE														
-0299-Jan-30	00:05:43	13983	359	-28434	55	A	-n	-0.3067	0.9254	36S	111W	72	295	08m15s
-0299-Jul-26	04:40:11	13976	359	-28428	60	T	-n	0.2526	1.0593	35N	174E	75	201	04m50s
-0298-Jan-19	01:22:52	13970	359	-28422	65	A	p-	0.4005	0.9531	1N	145W	66	186	05m48s
-0298-Jul-15	18:00:50	13963	359	-28416	70	H	p-	-0.5153	1.0089	8S	39W	59	36	00m59s
-0297-Jan-08	09:32:48	13957	359	-28410	75	P	t-	1.0725	0.8586	64N	70E	0		
-0297-Jun-05	10:12:29	13951	358	-28405	42	Pe	-t	1.5026	0.1014	68N	87W	0		
-0297-Jul-05	00:29:44	13950	358	-28404	80	P	t-	-1.3271	0.4015	65S	150W	0		
-0297-Nov-29	13:02:05	13945	358	-28399	47	T	-t	-0.9891	1.0298	75S	117W	7	810	01m28s
-0296-May-24	10:55:49	13938	358	-28393	52	A	-p	0.7429	0.9545	67N	58E	42	249	03m45s
-0296-Nov-18	03:41:06	13932	358	-28387	57	H	-n	-0.3387	1.0133	38S	176E	70	49	01m11s
-0295-May-13	16:17:16	13925	358	-28381	62	H	nn	-0.0551	1.0051	14N	8W	87	18	00m34s
-0295-Nov-07	13:06:28	13919	358	-28375	67	A	n-	0.3683	0.9587	6N	43E	68	161	05m03s
-0294-May-03	04:47:02	13912	357	-28369	72	T	p-	-0.8073	1.0505	38S	179E	36	282	04m11s
-0294-Oct-27	15:16:58	13906	357	-28363	77	P	t-	1.0874	0.8040	71N	59E	0		

-0293-Mar-24	14:09:43	13900	357	-28358	44	P	-t	1.0216	0.9754	72N	61W	0		
-0293-Apr-22	21:31:33	13899	357	-28357	82	Pb	t-	-1.5049	0.0443	71S	28W	0		
-0293-Sep-16	21:38:21	13894	357	-28352	49	P	-t	-1.2115	0.6010	72S	164W	0		
-0292-Mar-13	04:20:57	13887	357	-28346	54	H	-p	0.3153	1.0134	13N	170E	72	48	01m22s
-0292-Sep-05	05:33:41	13881	357	-28340	59	H	-n	-0.4362	1.0123	16S	147E	64	47	01m14s
-0291-Mar-02	11:51:24	13874	356	-28334	64	A	p-	-0.4426	0.9559	34S	72E	64	178	04m42s
-0291-Aug-25	19:54:47	13868	356	-28328	69	T	n-	0.2932	1.0595	29N	56W	73	205	05m02s
-0290-Feb-19	12:43:40	13861	356	-28322	74	P	t-	-1.1793	0.6523	71S	178W	0		
-0290-Aug-15	12:34:31	13855	356	-28316	79	T+	t-	1.0018	1.0125	70N	169W	0		
-0289-Jan-09	21:42:06	13849	356	-28311	46	P	-t	1.0684	0.8517	67N	88W	0		
-0289-Jul-06	16:06:11	13843	356	-28305	51	A	-t	-0.8844	0.9881	39S	2W	27	90	01m11s
-0289-Dec-30	07:48:12	13836	355	-28299	56	T	-n	0.3256	1.0196	5S	123E	71	71	02m04s
-0288-Jun-24	20:40:59	13830	355	-28293	61	A	nn	-0.1298	0.9551	16N	73W	83	165	05m53s
-0288-Dec-18	22:45:27	13823	355	-28287	66	T	n-	-0.3530	1.0463	44S	108W	69	165	03m38s
-0287-Jun-13	21:14:46	13817	355	-28281	71	A	p-	0.6343	0.9501	61N	98W	50	237	04m22s
-0287-Dec-08	14:02:11	13810	355	-28275	76	P	t-	-1.0343	0.9356	64S	123W	0		
-0286-May-04	14:41:21	13805	355	-28270	43	P	-t	-1.3070	0.4329	62S	77E	0		
-0286-Jun-03	01:10:30	13804	355	-28269	81	P	t-	1.3643	0.3320	64N	75E	0		
-0286-Oct-29	09:05:40	13798	355	-28264	48	P	-t	1.1224	0.7526	61N	164E	0		
-0285-Apr-24	04:44:58	13792	354	-28258	53	T	-p	-0.5098	1.0649	17S	179E	59	244	05m25s
-0285-Oct-18	09:46:12	13786	354	-28252	58	A	-p	0.4545	0.9195	16N	101E	63	337	09m27s
-0284-Apr-12	21:48:32	13779	354	-28246	63	T	n-	0.2272	1.0731	19N	96W	77	243	05m47s
-0284-Oct-06	09:36:43	13773	354	-28240	68	A	n-	-0.2440	0.9406	16S	84E	76	226	06m25s
-0283-Apr-02	13:11:30	13766	354	-28234	73	T	t-	0.9918	1.0166	61N	43W	6	525	00m58s
-0283-Sep-25	15:32:52	13760	354	-28228	78	A	t-	-0.9362	0.9841	55S	50W	20	158	01m08s
-0282-Feb-21	07:42:55	13754	353	-28223	45	P	-t	-1.0408	0.8908	61S	121W	0		
-0282-Aug-16	19:47:29	13748	353	-28217	50	P	-t	1.0165	0.9880	62N	62E	0		
-0281-Feb-10	07:35:00	13742	353	-28211	55	A	-p	-0.3384	0.9286	34S	137E	70	283	07m43s
-0281-Aug-06	12:20:21	13735	353	-28205	60	T	-n	0.3112	1.0539	35N	61E	72	187	04m18s
-0280-Jan-30	09:18:18	13729	353	-28199	65	A	p-	0.3785	0.9584	2N	94E	68	162	04m55s
-0280-Jul-26	01:13:26	13722	353	-28193	70	H	p-	-0.4508	1.0037	5S	148W	63	14	00m24s
-0279-Jan-18	17:58:29	13716	352	-28187	75	P	t-	1.0571	0.8886	63N	67W	0		
-0279-Jul-15	07:09:02	13709	352	-28181	80	P	t-	-1.2542	0.5280	64S	99E	0		

-0279-Dec-09	21:55:10	13704	352	-28176	47	Ts	-t	-0.9905	1.0294	74S	91E	7	-	01m26s
-0278-Jun-04	17:21:33	13698	352	-28170	52	A	-p	0.8281	0.9548	78N	39W	34	297	03m22s
-0278-Nov-29	12:24:22	13691	352	-28164	57	H	-n	-0.3400	1.0103	41S	47E	70	38	00m55s
-0277-May-24	23:11:38	13685	352	-28158	62	H	nn	0.0248	1.0093	21N	113W	88	32	01m00s
-0277-Nov-18	21:25:58	13679	351	-28152	67	A	n-	0.3659	0.9551	3N	84W	69	176	05m40s
-0276-May-13	12:07:29	13672	351	-28146	72	T	p-	-0.7329	1.0559	29S	62E	43	270	04m57s
-0276-Nov-06	23:14:10	13666	351	-28140	77	P	t-	1.0794	0.8165	70N	75W	0		
-0275-Apr-03	21:54:01	13660	351	-28135	44	P	-t	1.0791	0.8656	72N	168E	0		
-0275-May-03	05:03:07	13659	351	-28134	82	P	t-	-1.4393	0.1711	70S	155W	0		
-0275-Sep-27	05:22:58	13654	351	-28129	49	P	-t	-1.2365	0.5578	72S	65E	0		
-0274-Mar-24	11:54:50	13648	351	-28123	54	H	-p	0.3694	1.0126	20N	53E	68	47	01m15s
-0274-Sep-16	13:35:07	13641	351	-28117	59	H	-n	-0.4670	1.0120	22S	23E	62	46	01m10s
-0273-Mar-13	19:06:15	13635	350	-28111	64	A	p-	-0.3924	0.9569	27S	39W	67	170	04m50s
-0273-Sep-06	04:02:02	13629	350	-28105	69	T	n-	0.2544	1.0578	23N	179W	75	197	05m00s
-0272-Mar-01	19:55:05	13622	350	-28099	74	P	t-	-1.1350	0.7273	71S	59E	0		
-0272-Aug-25	20:31:20	13616	350	-28093	79	T	t-	0.9585	1.0435	75N	3E	16	526	02m25s
-0271-Jan-20	05:51:22	13611	350	-28088	46	P	-t	1.0793	0.8344	68N	137E	0		
-0271-Jul-16	23:05:14	13604	350	-28082	51	A	-t	-0.9591	0.9798	52S	113W	16	261	01m49s
-0270-Jan-09	16:25:15	13598	349	-28076	56	T	-n	0.3323	1.0240	3S	7W	71	86	02m30s
-0270-Jul-06	03:09:28	13592	349	-28070	61	A	nn	-0.2139	0.9519	11N	171W	78	180	06m34s
-0270-Dec-30	07:35:12	13585	349	-28064	66	T	n-	-0.3487	1.0479	44S	123E	69	170	03m47s
-0269-Jun-25	03:40:15	13579	349	-28058	71	A	p-	0.5478	0.9515	57N	174E	57	213	04m31s
-0269-Dec-19	22:47:38	13573	349	-28052	76	P	t-	-1.0344	0.9346	65S	94E	0		
-0268-May-14	21:46:10	13567	349	-28047	43	P	-t	-1.3762	0.3048	62S	40W	0		
-0268-Jun-13	07:59:22	13566	349	-28046	81	P	t-	1.2812	0.4805	64N	38W	0		
-0268-Nov-08	17:15:23	13561	348	-28041	48	P	-t	1.1320	0.7352	62N	32E	0		
-0267-May-04	12:13:05	13555	348	-28035	53	T	-p	-0.5786	1.0677	18S	66E	55	267	05m43s
-0267-Oct-28	17:35:53	13548	348	-28029	58	A	-p	0.4693	0.9174	13N	18W	62	350	10m06s
-0266-Apr-24	05:23:12	13542	348	-28023	63	T	nn	0.1607	1.0742	20N	150E	81	244	05m57s
-0266-Oct-17	17:31:12	13536	348	-28017	68	A	n-	-0.2253	0.9405	20S	36W	77	225	06m24s
-0265-Apr-13	20:36:03	13529	348	-28011	73	T	p-	0.9312	1.0201	60N	133W	21	187	01m16s
-0265-Oct-06	23:44:39	13523	348	-28005	78	A	t-	-0.9127	0.9855	56S	174W	24	123	01m01s
-0264-Mar-03	14:59:38	13518	347	-28000	45	P	-t	-1.0889	0.8093	61S	120E	0		

-0264-Aug-27	03:48:51	13512	347	-27994	50	P	-t	1.0596	0.9041	61N	68W	0			
-0263-Feb-20	14:54:47	13505	347	-27988	55	A	-p	-0.3780	0.9321	32S	28E	68	272	07m12s	
-0263-Aug-16	20:07:06	13499	347	-27982	60	T	-n	0.3638	1.0480	35N	55W	68	171	03m48s	
-0262-Feb-09	17:06:25	13493	347	-27976	65	A	p-	0.3496	0.9643	3N	24W	70	137	04m02s	
-0262-Aug-06	08:29:48	13486	347	-27970	70	A	n-	-0.3901	0.9979	3S	101E	67	8	00m13s	
-0261-Jan-30	02:18:40	13480	346	-27964	75	P	t-	1.0366	0.9284	63N	157E	0			
-0261-Jul-26	13:52:28	13474	346	-27958	80	P	t-	-1.1847	0.6474	63S	12W	0			
-0261-Dec-21	06:46:56	13469	346	-27953	47	Ts	-t	-0.9932	1.0292	71S	57W	5	-	01m24s	
-0260-Jun-14	23:49:44	13462	346	-27947	52	A	-p	0.9116	0.9542	89N	77W	24	416	03m05s	
-0260-Dec-09	21:07:56	13456	346	-27941	57	H	-n	-0.3408	1.0079	43S	82W	70	29	00m42s	
-0259-Jun-04	06:07:07	13450	346	-27935	62	Hm	nn	0.1046	1.0131	28N	142E	84	45	01m21s	
-0259-Nov-29	05:46:56	13444	345	-27929	67	A	n-	0.3654	0.9521	0N	149E	69	188	06m12s	
-0258-May-24	19:27:00	13437	345	-27923	72	T	p-	-0.6569	1.0605	21S	52W	49	263	05m37s	
-0258-Nov-18	07:14:35	13431	345	-27917	77	P	t-	1.0745	0.8241	69N	152E	0			
-0257-Apr-15	05:31:07	13426	345	-27912	44	P	-t	1.1421	0.7451	71N	39E	0			
-0257-May-14	12:31:05	13425	345	-27911	82	P	t-	-1.3709	0.3039	70S	79E	0			
-0257-Oct-08	13:17:13	13420	345	-27906	49	P	-t	-1.2543	0.5272	72S	69W	0			
-0256-Apr-03	19:20:38	13413	345	-27900	54	H	-p	0.4292	1.0114	28N	62W	64	43	01m05s	
-0256-Sep-26	21:45:11	13407	345	-27894	59	H	-p	-0.4914	1.0119	28S	102W	60	47	01m06s	
-0255-Mar-24	02:12:30	13401	344	-27888	64	A	nn	-0.3358	0.9576	19S	149W	70	163	04m57s	
-0255-Sep-16	12:17:35	13395	344	-27882	69	T	n-	0.2224	1.0559	17N	55E	77	189	04m55s	
-0254-Mar-13	02:56:26	13388	344	-27876	74	P	t-	-1.0822	0.8172	72S	61W	0			
-0254-Sep-06	04:35:42	13382	344	-27870	79	T	p-	0.9218	1.0404	69N	146W	22	353	02m27s	
-0253-Jan-31	13:53:23	13377	344	-27865	46	P	-t	1.0967	0.8056	69N	4E	0			
-0253-Jul-28	06:09:21	13371	344	-27859	51	P	-t	-1.0282	0.9296	69S	126E	0			
-0252-Jan-21	00:55:24	13365	343	-27853	56	T	-n	0.3451	1.0287	1S	136W	70	104	02m57s	
-0252-Jul-16	09:43:29	13358	343	-27847	61	A	np	-0.2928	0.9483	5N	89E	73	199	07m13s	
-0251-Jan-09	16:20:09	13352	343	-27841	66	T	n-	-0.3407	1.0499	43S	6W	70	176	03m59s	
-0251-Jul-05	10:09:14	13346	343	-27835	71	A	p-	0.4635	0.9524	51N	81E	62	197	04m43s	
-0251-Dec-30	07:30:28	13340	343	-27829	76	P	t-	-1.0331	0.9366	66S	48W	0			
-0250-May-26	04:49:11	13335	343	-27824	43	P	-t	-1.4472	0.1723	63S	156W	0			
-0250-Jun-24	14:50:25	13334	343	-27823	81	P	t-	1.1988	0.6286	65N	152W	0			
-0250-Nov-20	01:28:29	13328	342	-27818	48	P	-t	1.1386	0.7233	63N	101W	0			

-0249-May-15	19:36:47	13322	342	-27812	53	T	-p	-0.6516	1.0695	20S	46W	49	295	05m56s
-0249-Nov-09	01:31:57	13316	342	-27806	58	A	-p	0.4789	0.9158	11N	139W	61	360	10m44s
-0248-May-04	12:53:14	13310	342	-27800	63	T	nn	0.0903	1.0746	20N	38E	85	243	06m07s
-0248-Oct-28	01:32:54	13304	342	-27794	68	A	n-	-0.2117	0.9408	23S	157W	78	224	06m21s
-0247-Apr-24	03:55:06	13298	342	-27788	73	T	p-	0.8666	1.0211	59N	127E	30	143	01m23s
-0247-Oct-17	08:04:16	13291	342	-27782	78	A	p-	-0.8947	0.9867	58S	59E	26	104	00m55s
-0246-Mar-14	22:07:06	13286	341	-27777	45	P	-t	-1.1437	0.7163	61S	4E	0		
-0246-Sep-07	11:57:15	13280	341	-27771	50	P	-t	1.0972	0.8311	61N	160E	0		
-0246-Oct-06	21:20:43	13279	341	-27770	88	Pb	t-	-1.5238	0.0235	61S	176E	0		
-0245-Mar-03	22:06:36	13274	341	-27765	55	A	-p	-0.4244	0.9358	30S	79W	65	261	06m44s
-0245-Aug-28	04:00:49	13268	341	-27759	60	T	-p	0.4101	1.0420	33N	172W	66	153	03m20s
-0244-Feb-21	00:47:12	13262	341	-27753	65	A	p-	0.3137	0.9704	4N	140W	72	111	03m12s
-0244-Aug-16	15:53:24	13255	341	-27747	70	A	n-	-0.3362	0.9920	3S	10W	70	30	00m51s
-0243-Feb-09	10:32:26	13249	340	-27741	75	P	t-	1.0099	0.9800	62N	24E	0		
-0243-Aug-05	20:41:29	13243	340	-27735	80	P	t-	-1.1198	0.7580	62S	125W	0		
-0243-Dec-31	15:35:02	13238	340	-27730	47	T-	-t	-0.9992	1.0104	65S	162E	0		
-0242-Jun-26	06:21:48	13232	340	-27724	52	An	-t	0.9927	0.9507	71N	57W	5	-	02m50s
-0242-Dec-21	05:47:51	13226	340	-27718	57	H	-n	-0.3440	1.0060	44S	151E	70	22	00m32s
-0241-Jun-15	13:05:09	13220	340	-27712	62	H2	nn	0.1835	1.0160	34N	38E	79	56	01m34s
-0241-Dec-10	14:06:15	13213	339	-27706	67	A	n-	0.3640	0.9498	2S	23E	69	198	06m35s
-0240-Jun-04	02:47:13	13207	339	-27700	72	T	p-	-0.5808	1.0641	14S	166W	54	258	06m08s
-0240-Nov-28	15:16:02	13201	339	-27694	77	P	t-	1.0703	0.8308	68N	19E	0		
-0239-Apr-25	13:02:07	13196	339	-27689	44	P	-t	1.2098	0.6155	71N	88W	0		
-0239-May-24	19:56:58	13195	339	-27688	82	P	t-	-1.3007	0.4406	69S	45W	0		
-0239-Oct-18	21:20:46	13190	339	-27683	49	P	-t	-1.2655	0.5079	71S	155E	0		
-0238-Apr-15	02:36:06	13184	339	-27677	54	H	-p	0.4969	1.0096	37N	174W	60	38	00m53s
-0238-Oct-08	06:05:06	13178	339	-27671	59	H	-p	-0.5084	1.0118	33S	131E	59	47	01m03s
-0237-Apr-04	09:07:54	13172	338	-27665	64	A	nn	-0.2707	0.9582	11S	104E	74	157	05m05s
-0237-Sep-27	20:41:54	13166	338	-27659	69	T	n-	0.1975	1.0539	11N	74W	79	181	04m50s
-0236-Mar-23	09:49:11	13159	338	-27653	74	P	t-	-1.0220	0.9203	72S	179W	0		
-0236-Sep-16	12:48:03	13153	338	-27647	79	T	p-	0.8920	1.0366	62N	77E	26	273	02m24s
-0235-Feb-10	21:50:32	13148	338	-27642	46	P	-t	1.1189	0.7680	70N	129W	0		
-0235-Aug-07	13:16:55	13142	338	-27636	51	P	-t	-1.0934	0.8120	69S	6E	0		

-0234-Jan-31	09:21:19	13136	337	-27630	56	T	-n	0.3621	1.0337	2N	95E	69	122	03m24s
-0234-Jul-27	16:21:38	13130	337	-27624	61	A	-p	-0.3676	0.9445	1S	12W	68	220	07m46s
-0233-Jan-21	00:59:20	13124	337	-27618	66	T	n-	-0.3278	1.0522	40S	134W	71	183	04m13s
-0233-Jul-16	16:44:57	13118	337	-27612	71	A	p-	0.3840	0.9528	45N	15W	67	187	04m58s
-0232-Jan-10	16:07:32	13112	337	-27606	76	P	t-	-1.0279	0.9458	67S	171E	0		
-0232-Jun-05	11:55:05	13107	337	-27601	43	Pe	-t	-1.5168	0.0417	64S	87E	0		
-0232-Jul-04	21:48:14	13106	337	-27600	81	P	t-	1.1205	0.7702	66N	93E	0		
-0232-Nov-30	09:40:24	13101	337	-27595	48	P	-t	1.1453	0.7113	63N	126E	0		
-0231-May-26	03:01:05	13095	336	-27589	53	T	-p	-0.7245	1.0704	24S	158W	43	329	06m01s
-0231-Nov-19	09:30:49	13089	336	-27583	58	A	-p	0.4862	0.9150	9N	99E	61	366	11m19s
-0230-May-15	20:18:28	13082	336	-27577	63	Tm	nn	0.0163	1.0742	19N	72W	89	241	06m16s
-0230-Nov-08	09:41:11	13076	336	-27571	68	A	n-	-0.2030	0.9417	27S	81E	78	220	06m17s
-0229-May-05	11:06:30	13070	336	-27565	73	T	p-	0.7967	1.0210	59N	27E	37	118	01m25s
-0229-Oct-28	16:31:19	13064	336	-27559	78	A	p-	-0.8824	0.9882	61S	70W	28	88	00m47s
-0228-Mar-25	05:03:19	13059	335	-27554	45	P	-t	-1.2068	0.6089	61S	110W	0		
-0228-Sep-17	20:15:08	13053	335	-27548	50	P	-t	1.1271	0.7733	61N	26E	0		
-0228-Oct-17	05:57:10	13052	335	-27547	88	P	t-	-1.5081	0.0536	61S	37E	0		
-0227-Mar-14	05:09:22	13047	335	-27542	55	A	-p	-0.4786	0.9395	29S	175E	61	252	06m18s
-0227-Sep-07	12:01:11	13041	335	-27536	60	T	-p	0.4502	1.0359	31N	68E	63	134	02m52s
-0226-Mar-03	08:20:42	13035	335	-27530	65	A	n-	0.2708	0.9769	6N	106E	74	85	02m24s
-0226-Aug-27	23:22:59	13029	335	-27524	70	A	n-	-0.2880	0.9858	3S	124W	73	52	01m28s
-0225-Feb-20	18:38:20	13023	335	-27518	75	T	t-	0.9762	1.0159	55N	89W	12	256	01m06s
-0225-Aug-17	03:37:47	13017	334	-27512	80	P	t-	-1.0608	0.8572	62S	121E	0		
-0224-Jan-12	00:19:14	13012	334	-27507	47	P	-t	-1.0086	0.9934	64S	21E	0		
-0224-Jul-06	12:58:58	13006	334	-27501	52	P	-t	1.0699	0.8488	65N	164W	0		
-0224-Dec-31	14:24:32	13000	334	-27495	57	H	-n	-0.3494	1.0046	44S	24E	69	17	00m24s
-0223-Jun-25	20:07:32	12994	334	-27489	62	T	nn	0.2597	1.0184	39N	67W	75	65	01m42s
-0223-Dec-20	22:23:54	12988	334	-27483	67	A	n-	0.3621	0.9481	3S	103W	69	205	06m50s
-0222-Jun-15	10:08:09	12982	333	-27477	72	T	p-	-0.5048	1.0668	7S	80E	60	253	06m28s
-0222-Dec-09	23:18:00	12976	333	-27471	77	P	t-	1.0666	0.8369	67N	114W	0		
-0221-May-06	20:28:20	12971	333	-27466	44	P	-t	1.2809	0.4792	70N	146E	0		
-0221-Jun-05	03:22:15	12970	333	-27465	82	P	t-	-1.2299	0.5782	68S	169W	0		
-0221-Oct-30	05:31:05	12965	333	-27460	49	P	-t	-1.2720	0.4968	71S	18E	0		

-0220-Apr-25	09:45:42	12959	333	-27454	54	H	-p	0.5683	1.0072	45N	75E	55	30	00m37s
-0220-Oct-18	14:32:37	12953	333	-27448	59	H	-p	-0.5200	1.0122	39S	2E	58	49	01m03s
-0219-Apr-14	15:55:37	12947	332	-27442	64	A	nn	-0.2000	0.9586	3S	2W	78	154	05m11s
-0219-Oct-08	05:12:59	12941	332	-27436	69	T	n-	0.1782	1.0519	5N	156E	80	175	04m43s
-0218-Apr-03	16:33:48	12935	332	-27430	74	A	t-	-0.9547	0.9326	63S	26E	17	859	05m40s
-0218-Sep-27	21:07:51	12929	332	-27424	79	T	p-	0.8692	1.0324	56N	56W	29	220	02m16s
-0217-Feb-22	05:38:10	12924	332	-27419	46	P	-t	1.1493	0.7155	71N	100E	0		
-0217-Aug-18	20:32:11	12918	332	-27413	51	P	-t	-1.1509	0.7091	70S	116W	0		
-0216-Feb-11	17:39:02	12912	332	-27407	56	T	-n	0.3862	1.0389	7N	31W	67	141	03m48s
-0216-Aug-06	23:07:07	12906	331	-27401	61	A	-p	-0.4359	0.9405	8S	117W	64	244	08m12s
-0215-Jan-31	09:31:40	12900	331	-27395	66	T	n-	-0.3094	1.0548	36S	99E	72	190	04m30s
-0215-Jul-26	23:27:50	12894	331	-27389	71	A	p-	0.3099	0.9528	39N	115W	72	182	05m14s
-0214-Jan-21	00:38:34	12888	331	-27383	76	P	t-	-1.0184	0.9632	68S	31E	0		
-0214-Jul-16	04:50:58	12882	331	-27377	81	P	t-	1.0449	0.9070	67N	25W	0		
-0214-Dec-11	17:53:07	12877	331	-27372	48	P	-t	1.1507	0.7018	64N	8W	0		
-0213-Jun-06	10:24:24	12872	330	-27366	53	T	-p	-0.7983	1.0702	29S	89E	37	377	05m55s
-0213-Nov-30	17:32:03	12866	330	-27360	58	A	-p	0.4915	0.9148	7N	23W	61	369	11m47s
-0212-May-26	03:42:03	12860	330	-27354	63	T	nn	-0.0587	1.0729	17N	177E	87	237	06m23s
-0212-Nov-18	17:54:45	12854	330	-27348	68	A	n-	-0.1983	0.9431	30S	42W	78	214	06m10s
-0211-May-15	18:13:35	12848	330	-27342	73	T	p-	0.7238	1.0201	59N	72W	43	99	01m25s
-0211-Nov-08	01:04:08	12842	330	-27336	78	A	p-	-0.8741	0.9898	65S	159E	29	74	00m40s
-0210-Apr-05	11:51:57	12837	330	-27331	45	P	-t	-1.2752	0.4922	61S	138E	0		
-0210-May-05	02:07:32	12836	330	-27330	83	Pb	t-	1.5502	0.0106	62N	80E	0		
-0210-Sep-29	04:40:05	12831	329	-27325	50	P	-t	1.1516	0.7258	61N	110W	0		
-0210-Oct-28	14:39:15	12830	329	-27324	88	P	t-	-1.4964	0.0758	62S	103W	0		
-0209-Mar-25	12:04:04	12825	329	-27319	55	A	-p	-0.5399	0.9431	28S	72E	57	245	05m55s
-0209-Sep-18	20:09:26	12819	329	-27313	60	T	-p	0.4833	1.0298	28N	55W	61	114	02m25s
-0208-Mar-13	15:47:46	12813	329	-27307	65	A	n-	0.2212	0.9833	7N	7W	77	61	01m41s
-0208-Sep-07	06:59:37	12807	329	-27301	70	A	nn	-0.2464	0.9797	5S	121E	76	74	02m05s
-0207-Mar-03	02:37:37	12801	329	-27295	75	T	t-	0.9360	1.0242	51N	154E	20	231	01m42s
-0207-Aug-27	10:42:02	12796	328	-27289	80	A-	t-	-1.0083	0.9446	61S	5E	0		
-0206-Jan-22	08:56:17	12791	328	-27284	47	P	-t	-1.0238	0.9653	63S	119W	0		
-0206-Jul-17	19:42:48	12785	328	-27278	52	P	-t	1.1422	0.7232	64N	84E	0		

-0199-Mar-04	13:20:42	12704	326	-27196	46	P	-t	1.1847	0.6533	71N	30W	0	
-0199-Aug-29	03:53:06	12699	326	-27190	51	P	-t	-1.2028	0.6174	71S	120E	0	
-0198-Feb-22	01:50:19	12693	326	-27184	56	T	-n	0.4165	1.0441	12N	157W	65	161 04m10s
-0198-Aug-18	05:59:23	12687	326	-27178	61	A	-p	-0.4982	0.9364	14S	137E	60	272 08m28s
-0197-Feb-11	17:56:48	12681	325	-27172	66	T	n-	-0.2850	1.0574	31S	28W	73	197 04m48s
-0197-Aug-07	06:20:01	12675	325	-27166	71	A	nn	0.2425	0.9525	32N	141E	76	179 05m29s
-0196-Feb-01	09:01:03	12669	325	-27160	76	P	p-	-1.0026	0.9921	69S	107W	0	
-0196-Jul-26	12:03:13	12663	325	-27154	81	A	t-	0.9759	0.9909	79N	163W	12	157 00m31s
-0196-Dec-22	02:02:01	12659	325	-27149	48	P	-t	1.1583	0.6886	65N	141W	0	
-0195-Jun-16	17:49:21	12653	325	-27143	53	T	-p	-0.8711	1.0687	37S	25W	29	456 05m36s
-0195-Dec-11	01:32:58	12647	325	-27137	58	A	-p	0.4970	0.9153	6N	145W	60	370 12m04s
-0194-Jun-06	11:03:46	12641	324	-27131	63	T	-n	-0.1346	1.0707	15N	67E	82	232 06m26s
-0194-Nov-30	02:10:28	12635	324	-27125	68	A	n-	-0.1944	0.9453	32S	166W	79	206 05m58s
-0193-May-27	01:15:58	12629	324	-27119	73	T	p-	0.6477	1.0181	58N	170W	49	81 01m20s
-0193-Nov-19	09:41:35	12624	324	-27113	78	A	p-	-0.8690	0.9919	69S	28E	29	58 00m31s
-0192-Apr-15	18:31:46	12619	324	-27108	45	P	-t	-1.3501	0.3640	61S	29E	0	
-0192-May-15	08:44:04	12618	324	-27107	83	P	t-	1.4738	0.1448	62N	29W	0	
-0192-Oct-09	13:12:26	12613	324	-27102	50	P	-t	1.1703	0.6897	61N	112E	0	
-0192-Nov-07	23:26:13	12612	324	-27101	88	P	t-	-1.4886	0.0904	62S	116E	0	
-0191-Apr-04	18:51:40	12607	323	-27096	55	A	-p	-0.6074	0.9464	28S	30W	52	242 05m35s
-0191-Sep-29	04:25:09	12601	323	-27090	60	T	-p	0.5097	1.0239	26N	180W	59	93 01m59s
-0190-Mar-24	23:06:45	12596	323	-27084	65	A	nn	0.1641	0.9897	8N	117W	81	37 01m01s
-0190-Sep-18	14:43:59	12590	323	-27078	70	A	nn	-0.2120	0.9736	7S	4E	78	96 02m41s
-0189-Mar-14	10:29:16	12584	323	-27072	75	T	t-	0.8891	1.0320	48N	38E	27	231 02m15s
-0189-Sep-07	17:55:01	12578	323	-27066	80	A	t-	-0.9631	0.9257	54S	87W	15	1031 06m20s
-0188-Feb-02	17:26:58	12573	323	-27061	47	P	-t	-1.0443	0.9274	62S	103E	0	
-0188-Jul-28	02:34:56	12568	322	-27055	52	P	-t	1.2083	0.6081	63N	29W	0	
-0187-Jan-22	07:19:38	12562	322	-27049	57	H	-p	-0.3739	1.0028	41S	135E	68	11 00m15s
-0187-Jul-17	10:29:03	12556	322	-27043	62	T	-n	0.4013	1.0212	45N	83E	66	79 01m47s
-0186-Jan-11	14:42:21	12550	322	-27037	67	A	n-	0.3458	0.9465	3S	10E	70	209 06m51s
-0186-Jul-07	01:00:50	12545	322	-27031	72	T	n-	-0.3595	1.0695	3N	147W	69	242 06m35s
-0186-Dec-31	15:14:19	12539	322	-27025	77	P	t-	1.0523	0.8613	65N	16W	0	
-0185-May-28	11:08:18	12534	321	-27020	44	P	-t	1.4316	0.1919	68N	100W	0	

-0185-Jun-26	18:12:59	12533	321	-27019	82	P	t-	-1.0886	0.8515	66S	55W	0	
-0185-Nov-20	22:09:26	12528	321	-27014	49	P	-t	-1.2733	0.4946	69S	102E	0	
-0184-May-16	23:45:16	12522	321	-27008	54	H	-p	0.7248	1.0003	64N	142W	43	2 00m01s
-0184-Nov-09	07:46:24	12517	321	-27002	59	H	-p	-0.5295	1.0140	48S	103E	58	57 01m08s
-0183-May-06	05:08:04	12511	321	-26996	64	A	nn	-0.0412	0.9582	13N	154E	88	152 05m20s
-0183-Oct-29	22:36:10	12505	321	-26990	69	T	n-	0.1567	1.0486	4S	108W	81	164 04m32s
-0182-Apr-25	05:43:24	12499	321	-26984	74	A	p-	-0.8024	0.9429	40S	161E	36	350 06m13s
-0182-Oct-19	14:06:43	12494	320	-26978	79	T	p-	0.8408	1.0239	46N	37E	32	149 01m53s
-0181-Mar-15	20:54:27	12489	320	-26973	46	P	-t	1.2281	0.5759	72N	158W	0	
-0181-Apr-14	08:48:31	12488	320	-26972	84	Pb	t-	-1.5135	0.0691	71S	166E	0	
-0181-Sep-09	11:22:56	12483	320	-26967	51	P	-t	-1.2465	0.5409	72S	7W	0	
-0180-Mar-04	09:53:02	12477	320	-26961	56	T	-p	0.4544	1.0492	18N	79E	63	182 04m27s
-0180-Aug-28	13:01:40	12472	320	-26955	61	A	-p	-0.5522	0.9323	21S	28E	56	301 08m37s
-0179-Feb-22	02:14:03	12466	320	-26949	66	T	n-	-0.2541	1.0602	26S	153W	75	204 05m08s
-0179-Aug-17	13:20:36	12460	319	-26943	71	A	nn	0.1814	0.9519	25N	35E	79	179 05m43s
-0178-Feb-11	17:16:03	12454	319	-26937	76	T	p-	-0.9814	1.0078	76S	87E	10	154 00m26s
-0178-Aug-06	19:23:15	12449	319	-26931	81	A	t-	0.9124	0.9949	79N	1W	24	44 00m19s
-0177-Jan-02	10:06:57	12444	319	-26926	48	P	-t	1.1686	0.6712	67N	87E	0	
-0177-Jun-28	01:16:31	12438	319	-26920	53	T	-t	-0.9422	1.0656	47S	141W	19	649 04m59s
-0177-Dec-22	09:33:12	12433	319	-26914	58	A	-p	0.5028	0.9165	6N	93E	60	366 12m08s
-0176-Jun-16	18:26:01	12427	319	-26908	63	T	-n	-0.2099	1.0678	12N	44W	78	226 06m23s
-0176-Dec-10	10:27:48	12421	318	-26902	68	A	n-	-0.1912	0.9479	34S	71E	79	195 05m43s
-0175-Jun-06	08:16:52	12415	318	-26896	73	T	p-	0.5713	1.0156	56N	92E	55	65 01m13s
-0175-Nov-29	18:21:50	12410	318	-26890	78	A	p-	-0.8656	0.9944	73S	102W	30	39 00m21s
-0174-Apr-27	01:04:22	12405	318	-26885	45	P	-t	-1.4298	0.2274	61S	79W	0	
-0174-May-26	15:16:10	12404	318	-26884	83	P	t-	1.3941	0.2844	63N	137W	0	
-0174-Oct-20	21:51:31	12399	318	-26879	50	P	-t	1.1838	0.6638	61N	27W	0	
-0174-Nov-19	08:17:00	12398	318	-26878	88	P	t-	-1.4840	0.0991	63S	27W	0	
-0173-Apr-16	01:33:29	12394	318	-26873	55	A	-p	-0.6798	0.9494	29S	130W	47	246 05m18s
-0173-Oct-10	12:47:24	12388	318	-26867	60	T	-p	0.5301	1.0183	23N	53E	58	73 01m35s
-0172-Apr-04	06:20:42	12382	317	-26861	65	A	nn	0.1017	0.9959	9N	134E	84	14 00m24s
-0172-Sep-28	22:35:48	12377	317	-26855	70	A	nn	-0.1848	0.9679	10S	115W	79	117 03m17s
-0171-Mar-24	18:14:28	12371	317	-26849	75	T	p-	0.8359	1.0394	47N	77W	33	235 02m45s

-0171-Sep-18	01:15:55	12365	317	-26843	80	A	p-	-0.9243	0.9233	52S	165E	22	740	06m40s
-0170-Feb-13	01:49:17	12360	317	-26838	47	P	-t	-1.0717	0.8762	62S	32W	0		
-0170-Mar-14	10:28:18	12359	317	-26837	85	Pb	t-	1.5121	0.0354	61N	5W	0		
-0170-Aug-08	09:36:10	12355	317	-26832	52	P	-t	1.2680	0.5044	62N	144W	0		
-0169-Feb-02	15:34:11	12349	316	-26826	57	H	-p	-0.3962	1.0024	39S	13E	66	9	00m12s
-0169-Jul-28	17:51:03	12343	316	-26820	62	T	-p	0.4642	1.0217	46N	24W	62	83	01m45s
-0168-Jan-22	22:40:48	12338	316	-26814	67	A	n-	0.3293	0.9465	2S	111W	71	208	06m40s
-0168-Jul-17	08:34:02	12332	316	-26808	72	T	n-	-0.2919	1.0695	6N	99E	73	236	06m25s
-0167-Jan-10	23:05:20	12326	316	-26802	77	P	t-	1.0391	0.8839	64N	144W	0		
-0167-Jun-07	18:24:54	12322	316	-26797	44	Pe	-t	1.5087	0.0461	67N	139E	0		
-0167-Jul-07	01:41:22	12321	316	-26796	82	P	t-	-1.0205	0.9819	65S	178W	0		
-0167-Dec-01	06:34:22	12316	316	-26791	49	P	-t	-1.2705	0.4995	68S	37W	0		
-0166-May-28	06:36:55	12310	315	-26785	54	A	-t	0.8081	0.9955	74N	112E	36	27	00m19s
-0166-Nov-20	16:30:43	12305	315	-26779	59	T	-p	-0.5292	1.0157	51S	26W	58	64	01m15s
-0165-May-17	11:36:10	12299	315	-26773	64	A	nn	0.0442	0.9573	21N	55E	87	156	05m21s
-0165-Nov-10	07:25:10	12293	315	-26767	69	T	n-	0.1521	1.0475	8S	119E	81	160	04m28s
-0164-May-05	12:11:43	12288	315	-26761	74	A	p-	-0.7199	0.9469	30S	57E	44	279	06m20s
-0164-Oct-29	22:44:59	12282	315	-26755	79	T	p-	0.8344	1.0199	42N	97W	33	123	01m39s
-0163-Mar-26	04:23:28	12277	314	-26750	46	P	-t	1.2759	0.4893	72N	75E	0		
-0163-Apr-24	15:44:27	12277	314	-26749	84	P	t-	-1.4395	0.1986	71S	47E	0		
-0163-Sep-19	18:58:44	12272	314	-26744	51	P	-t	-1.2843	0.4754	72S	136W	0		
-0162-Mar-15	17:49:53	12266	314	-26738	56	T	-p	0.4978	1.0540	25N	43W	60	205	04m40s
-0162-Sep-08	20:12:18	12261	314	-26732	61	A	-p	-0.5987	0.9284	28S	84W	53	332	08m39s
-0161-Mar-05	10:22:45	12255	314	-26726	66	T	n-	-0.2164	1.0627	20S	83E	77	210	05m27s
-0161-Aug-28	20:32:33	12249	314	-26720	71	A	nn	0.1292	0.9513	19N	75W	82	180	05m54s
-0160-Feb-23	01:21:49	12244	314	-26714	76	T	p-	-0.9537	1.0099	74S	77W	17	117	00m36s
-0160-Aug-17	02:52:49	12238	313	-26708	81	A	t-	0.8558	0.9973	70N	137W	31	18	00m11s
-0159-Jan-12	18:04:47	12233	313	-26703	48	P	-t	1.1838	0.6455	68N	45W	0		
-0159-Jul-08	08:48:07	12228	313	-26697	53	T-	-t	-1.0095	1.0054	67S	100E	0		
-0159-Aug-06	16:16:46	12227	313	-26696	91	Pb	t-	1.5261	0.0124	69N	137E	0		
-0158-Jan-01	17:29:05	12222	313	-26691	58	A	-p	0.5126	0.9184	7N	28W	59	360	11m54s
-0158-Jun-28	01:48:40	12217	313	-26685	63	T	-n	-0.2842	1.0639	7N	155W	74	218	06m13s
-0158-Dec-21	18:43:58	12211	313	-26679	68	A	n-	-0.1863	0.9514	35S	51W	79	181	05m22s

-0157-Jun-17	15:16:22	12205	313	-26673	73	H	p-	0.4944	1.0121	53N	7W	60	48	01m00s
-0157-Dec-11	03:02:18	12200	312	-26667	78	A	p-	-0.8618	0.9976	77S	132E	30	17	00m09s
-0156-May-07	07:31:24	12195	312	-26662	45	Pe	-t	-1.5129	0.0848	62S	174E	0		
-0156-Jun-05	21:46:26	12194	312	-26661	83	P	t-	1.3132	0.4257	64N	115E	0		
-0156-Oct-31	06:36:55	12190	312	-26656	50	P	-t	1.1920	0.6479	62N	168W	0		
-0156-Nov-29	17:10:26	12189	312	-26655	88	P	t-	-1.4817	0.1030	64S	171W	0		
-0155-Apr-26	08:09:15	12184	312	-26650	55	A	-p	-0.7575	0.9520	32S	131E	41	261	05m02s
-0155-Oct-20	21:16:02	12178	312	-26644	60	H	-p	0.5447	1.0130	20N	76W	57	53	01m10s
-0154-Apr-15	13:28:49	12173	312	-26638	65	H	nn	0.0336	1.0019	10N	27E	88	7	00m11s
-0154-Oct-10	06:34:53	12167	311	-26632	70	A	nn	-0.1639	0.9624	14S	125E	80	138	03m52s
-0153-Apr-05	01:52:54	12162	311	-26626	75	T	p-	0.7763	1.0463	47N	170E	39	240	03m13s
-0153-Sep-29	08:46:12	12156	311	-26620	80	A	p-	-0.8931	0.9205	52S	52E	26	651	06m53s
-0152-Feb-24	10:04:32	12151	311	-26615	47	P	-t	-1.1051	0.8134	61S	166W	0		
-0152-Mar-24	18:23:40	12150	311	-26614	85	P	t-	1.4646	0.1258	61N	134W	0		
-0152-Aug-18	16:46:06	12146	311	-26609	52	P	-t	1.3212	0.4117	62N	98E	0		
-0151-Feb-12	23:41:55	12140	311	-26603	57	H	-p	-0.4237	1.0019	37S	108W	65	7	00m10s
-0151-Aug-08	01:20:30	12135	311	-26597	62	T	-p	0.5220	1.0218	46N	133W	58	87	01m43s
-0150-Feb-02	06:31:13	12129	310	-26591	67	A	n-	0.3069	0.9469	1S	131E	72	204	06m25s
-0150-Jul-28	16:13:01	12124	310	-26585	72	T	n-	-0.2287	1.0689	8N	16W	77	230	06m11s
-0149-Jan-22	06:49:33	12118	310	-26579	77	A+	t-	1.0201	0.9163	63N	90E	0		
-0149-Jul-18	09:14:44	12112	310	-26573	82	T	t-	-0.9568	1.0553	49S	71E	16	636	04m06s
-0149-Dec-12	14:58:26	12108	310	-26568	49	P	-t	-1.2694	0.5015	67S	175W	0		
-0148-Jun-07	13:28:35	12102	310	-26562	54	A	-t	0.8902	0.9897	86N	5E	27	81	00m39s
-0148-Dec-01	01:16:25	12097	310	-26556	59	T	-p	-0.5287	1.0179	54S	154W	58	72	01m23s
-0147-May-27	18:01:05	12091	309	-26550	64	A	nn	0.1318	0.9560	28N	43W	82	162	05m21s
-0147-Nov-20	16:17:16	12086	309	-26544	69	T	n-	0.1497	1.0468	11S	15W	81	157	04m26s
-0146-May-16	18:36:13	12080	309	-26538	74	A	p-	-0.6332	0.9504	21S	44W	51	234	06m22s
-0146-Nov-10	07:27:30	12075	309	-26532	79	T	p-	0.8321	1.0163	39N	128E	33	101	01m25s
-0145-Apr-06	11:44:43	12070	309	-26527	46	P	-t	1.3308	0.3888	72N	50W	0		
-0145-May-05	22:36:13	12069	309	-26526	84	P	t-	-1.3605	0.3384	70S	69W	0		
-0145-Oct-01	02:43:56	12064	309	-26521	51	P	-t	-1.3138	0.4251	72S	92E	0		
-0144-Mar-26	01:39:16	12059	308	-26515	56	T	-p	0.5481	1.0584	32N	164W	57	229	04m47s
-0144-Sep-19	03:32:16	12053	308	-26509	61	A	-p	-0.6375	0.9247	35S	162E	50	364	08m36s

-0143-Mar-15	18:23:43	12048	308	-26503	66	T	n-	-0.1721	1.0650	13S	40W	80	216	05m45s
-0143-Sep-08	03:54:33	12042	308	-26497	71	A	nn	0.0844	0.9505	12N	173E	85	182	06m03s
-0142-Mar-05	09:17:28	12037	308	-26491	76	T	p-	-0.9181	1.0118	68S	139E	23	103	00m46s
-0142-Aug-28	10:32:10	12031	308	-26485	81	A	p-	0.8062	0.9988	62N	99E	36	7	00m05s
-0141-Jan-24	01:56:09	12027	308	-26480	48	P	-t	1.2039	0.6118	69N	175W	0		
-0141-Jul-19	16:24:18	12021	307	-26474	53	P	-t	-1.0735	0.8808	68S	26W	0		
-0141-Aug-18	00:07:09	12020	307	-26473	91	P	t-	1.4736	0.1127	70N	6E	0		
-0140-Jan-13	01:20:31	12016	307	-26468	58	A	-p	0.5263	0.9208	10N	148W	58	352	11m25s
-0140-Jul-08	09:14:23	12010	307	-26462	63	T	-p	-0.3556	1.0594	2N	92E	69	209	05m53s
-0139-Jan-01	02:59:10	12005	307	-26456	68	A	n-	-0.1798	0.9554	34S	173W	79	166	04m57s
-0139-Jun-27	22:15:22	11999	307	-26450	73	H	p-	0.4180	1.0081	49N	108W	65	31	00m42s
-0139-Dec-21	11:43:02	11994	307	-26444	78	H	p-	-0.8576	1.0012	81S	15E	31	8	00m05s
-0138-Jun-17	04:15:39	11988	307	-26438	83	P	t-	1.2317	0.5671	65N	7E	0		
-0138-Nov-11	15:25:48	11984	306	-26433	50	P	-t	1.1979	0.6365	62N	50E	0		
-0138-Dec-11	02:03:16	11983	306	-26432	88	P	t-	-1.4789	0.1079	64S	45E	0		
-0137-May-07	14:42:19	11978	306	-26427	55	A	-p	-0.8379	0.9538	37S	32E	33	301	04m46s
-0137-Nov-01	05:49:30	11973	306	-26421	60	H	-p	0.5547	1.0083	17N	154E	56	34	00m47s
-0136-Apr-25	20:34:27	11967	306	-26415	65	H	nn	-0.0379	1.0074	10N	79W	88	26	00m44s
-0136-Oct-20	14:38:50	11962	306	-26409	70	A	nn	-0.1478	0.9574	17S	3E	81	157	04m26s
-0135-Apr-15	09:26:44	11956	306	-26403	75	T	p-	0.7120	1.0526	47N	59E	44	245	03m39s
-0135-Oct-09	16:24:10	11951	306	-26397	80	A	p-	-0.8682	0.9177	54S	64W	29	614	07m02s
-0134-Mar-06	18:09:23	11946	305	-26392	47	P	-t	-1.1469	0.7346	61S	63E	0		
-0134-Apr-05	02:09:58	11945	305	-26391	85	P	t-	1.4098	0.2308	61N	100E	0		
-0134-Aug-30	00:07:15	11941	305	-26386	52	P	-t	1.3662	0.3334	61N	22W	0		
-0134-Sep-28	15:55:19	11940	305	-26385	90	Pb	t-	-1.5413	0.0430	61S	102W	0		
-0133-Feb-24	07:38:16	11935	305	-26380	57	H	-p	-0.4600	1.0015	35S	134E	62	6	00m08s
-0133-Aug-19	09:00:03	11930	305	-26374	62	T	-p	0.5722	1.0215	45N	115E	55	89	01m40s
-0132-Feb-13	14:10:57	11924	305	-26368	67	A	nn	0.2762	0.9476	0N	15E	74	200	06m09s
-0132-Aug-07	23:59:36	11919	305	-26362	72	T	n-	-0.1716	1.0676	8N	133W	80	224	05m53s
-0131-Feb-01	14:26:51	11913	304	-26356	77	An	t-	0.9953	0.9121	60N	29W	4	-	07m45s
-0131-Jul-28	16:51:18	11908	304	-26350	82	T	p-	-0.8961	1.0539	41S	44W	26	398	04m14s
-0131-Dec-22	23:23:45	11903	304	-26345	49	P	-t	-1.2682	0.5038	66S	47E	0		
-0130-Jun-18	20:17:21	11898	304	-26339	54	A	-t	0.9738	0.9819	79N	92E	12	302	01m02s

-0130-Dec-12	10:03:20	11892	304	-26333	59	T	-p	-0.5278	1.0206	55S	78E	58	83	01m35s
-0129-Jun-08	00:24:15	11887	304	-26327	64	A	nn	0.2203	0.9542	35N	139W	77	172	05m19s
-0129-Dec-02	01:11:42	11882	304	-26321	69	T	n-	0.1491	1.0465	13S	150W	82	156	04m25s
-0128-May-27	01:00:49	11876	303	-26315	74	A	p-	-0.5460	0.9534	12S	144W	57	203	06m16s
-0128-Nov-20	16:12:07	11871	303	-26309	79	T	p-	0.8320	1.0131	37N	8W	33	81	01m10s
-0127-Apr-16	19:03:15	11866	303	-26304	46	P	-t	1.3887	0.2817	71N	174W	0		
-0127-May-16	05:28:03	11865	303	-26303	84	P	t-	-1.2801	0.4821	69S	175E	0		
-0127-Oct-11	10:35:04	11861	303	-26298	51	P	-t	-1.3375	0.3851	72S	40W	0		
-0126-Apr-06	09:22:19	11855	303	-26292	56	T	-p	0.6040	1.0623	40N	76E	53	255	04m48s
-0126-Sep-30	11:01:19	11850	303	-26286	61	A	-p	-0.6686	0.9214	41S	46E	48	395	08m30s
-0125-Mar-27	02:16:41	11844	303	-26280	66	T	nn	-0.1214	1.0669	6S	161W	83	220	05m59s
-0125-Sep-19	11:27:09	11839	302	-26274	71	A	nn	0.0477	0.9500	6N	57E	87	184	06m08s
-0124-Mar-15	17:03:53	11834	302	-26268	76	T	p-	-0.8758	1.0131	60S	8E	28	93	00m56s
-0124-Sep-07	18:22:00	11828	302	-26262	81	A	p-	0.7643	0.9999	54N	24W	40	1	00m00s
-0123-Feb-03	09:38:12	11824	302	-26257	48	P	-t	1.2306	0.5667	70N	57E	0		
-0123-Jul-30	00:05:42	11818	302	-26251	53	P	-t	-1.1330	0.7650	69S	153W	0		
-0123-Aug-28	08:05:29	11817	302	-26250	91	P	t-	1.4273	0.2010	71N	127W	0		
-0122-Jan-23	09:05:15	11813	302	-26245	58	A	-p	0.5455	0.9238	13N	93E	57	343	10m42s
-0122-Jul-19	16:43:30	11807	302	-26239	63	T	-p	-0.4230	1.0541	3S	23W	65	197	05m24s
-0121-Jan-12	11:08:46	11802	301	-26233	68	A	n-	-0.1680	0.9601	32S	66E	80	147	04m26s
-0121-Jul-09	05:16:38	11797	301	-26227	73	H	n-	0.3445	1.0034	44N	150E	70	12	00m19s
-0120-Jan-01	20:20:57	11791	301	-26221	78	H	p-	-0.8510	1.0055	82S	86W	31	37	00m21s
-0120-Jun-27	10:45:31	11786	301	-26215	83	P	t-	1.1509	0.7065	66N	101W	0		
-0120-Nov-22	00:17:47	11781	301	-26210	50	P	-t	1.2011	0.6302	63N	93W	0		
-0120-Dec-21	10:55:23	11780	301	-26209	88	P	t-	-1.4759	0.1129	65S	98W	0		
-0119-May-17	21:12:45	11776	301	-26204	55	A	-t	-0.9206	0.9546	44S	64W	23	418	04m28s
-0119-Nov-11	14:27:24	11770	300	-26198	60	H	-p	0.5606	1.0041	15N	22E	56	17	00m24s
-0118-May-07	03:35:24	11765	300	-26192	65	Hm	nn	-0.1143	1.0125	10N	176E	83	43	01m15s
-0118-Oct-31	22:49:06	11760	300	-26186	70	A	nn	-0.1377	0.9529	21S	120W	82	174	05m00s
-0117-Apr-26	16:56:03	11754	300	-26180	75	T	p-	0.6434	1.0583	47N	50W	50	248	04m04s
-0117-Oct-21	00:09:19	11749	300	-26174	80	A	p-	-0.8493	0.9153	56S	178E	32	599	07m07s
-0116-Mar-17	02:07:10	11744	300	-26169	47	P	-t	-1.1942	0.6451	61S	66W	0		
-0116-Apr-15	09:51:36	11744	300	-26168	85	P	t-	1.3513	0.3435	61N	25W	0		

-0116-Sep-09	07:38:28	11739	300	-26163	52	P	-t	1.4037	0.2683	61N	144W	0	
-0116-Oct-08	23:38:59	11738	300	-26162	90	P	t-	-1.5144	0.0888	61S	132E	0	
-0115-Mar-06	15:26:25	11734	299	-26157	57	H	-p	-0.5023	1.0009	33S	17E	60	4 00m05s
-0115-Aug-29	16:47:31	11728	299	-26151	62	T	-p	0.6165	1.0210	44N	0W	52	90 01m36s
-0114-Feb-23	21:41:48	11723	299	-26145	67	A	nn	0.2388	0.9485	2N	99W	76	194 05m53s
-0114-Aug-19	07:53:41	11718	299	-26139	72	T	n-	-0.1204	1.0658	8N	108E	83	216 05m36s
-0113-Feb-12	21:54:28	11712	299	-26133	77	A	t-	0.9622	0.9179	52N	135W	15	1138 07m42s
-0113-Aug-09	00:35:07	11707	299	-26127	82	T	p-	-0.8416	1.0510	36S	162W	32	308 04m05s
-0112-Jan-03	07:45:15	11702	299	-26122	49	P	-t	-1.2711	0.4988	65S	89W	0	
-0112-Jun-29	03:07:55	11697	298	-26116	54	P	-t	1.0546	0.8847	65N	16W	0	
-0112-Dec-22	18:48:10	11692	298	-26110	59	T	-p	-0.5293	1.0238	56S	48W	58	96 01m48s
-0111-Jun-18	06:47:46	11686	298	-26104	64	A	np	0.3083	0.9519	42N	127E	72	185 05m17s
-0111-Dec-12	10:05:15	11681	298	-26098	69	T	n-	0.1479	1.0467	15S	77E	82	157 04m26s
-0110-Jun-07	07:24:11	11676	298	-26092	74	A	p-	-0.4569	0.9557	5S	117E	63	181 06m05s
-0110-Dec-02	00:58:10	11670	298	-26086	79	T	p-	0.8336	1.0104	35N	144W	33	65 00m58s
-0109-Apr-28	02:16:28	11666	298	-26081	46	P	-t	1.4515	0.1644	71N	63E	0	
-0109-May-27	12:18:59	11665	298	-26080	84	P	t-	-1.1975	0.6310	68S	59E	0	
-0109-Oct-22	18:33:03	11660	297	-26075	51	P	-t	-1.3551	0.3559	71S	175W	0	
-0108-Apr-16	16:59:28	11655	297	-26069	56	T	-p	0.6654	1.0654	49N	43W	48	286 04m43s
-0108-Oct-10	18:39:28	11650	297	-26063	61	A	-p	-0.6924	0.9186	47S	72W	46	424 08m21s
-0107-Apr-06	10:01:38	11644	297	-26057	66	Tm	nn	-0.0641	1.0684	2N	80E	86	223 06m10s
-0107-Sep-29	19:09:41	11639	297	-26051	71	A	nn	0.0184	0.9495	0S	61W	89	185 06m12s
-0106-Mar-27	00:40:49	11634	297	-26045	76	T	p-	-0.8262	1.0142	51S	116W	34	86 01m07s
-0106-Sep-19	02:21:39	11628	297	-26039	81	H	p-	0.7299	1.0006	47N	149W	43	3 00m03s
-0105-Feb-14	17:10:52	11624	296	-26034	48	P	-t	1.2642	0.5101	71N	70W	0	
-0105-Aug-10	07:54:02	11619	296	-26028	53	P	-t	-1.1868	0.6606	70S	77E	0	
-0105-Sep-08	16:12:50	11618	296	-26027	91	P	t-	1.3882	0.2757	71N	97E	0	
-0104-Feb-03	16:44:07	11613	296	-26022	58	A	-p	0.5695	0.9271	17N	24W	55	332 09m50s
-0104-Jul-30	00:16:32	11608	296	-26016	63	T	-p	-0.4866	1.0484	9S	139W	61	184 04m48s
-0103-Jan-22	19:14:57	11603	296	-26010	68	A	nn	-0.1528	0.9652	29S	55W	81	127 03m53s
-0103-Jul-19	12:20:25	11597	296	-26004	73	A	nn	0.2742	0.9982	38N	45E	74	6 00m11s
-0102-Jan-12	04:55:02	11592	296	-25998	78	T	p-	-0.8404	1.0104	80S	170E	32	67 00m39s
-0102-Jul-08	17:17:44	11587	295	-25992	83	P	t-	1.0719	0.8416	67N	150E	0	

1ST CENTURY BCE

-0099-May-07	00:21:38	11556	294	-25957	75	T	p-	0.5710	1.0633	47N	158W	55	251	04m28s
-0099-Oct-31	08:00:53	11551	294	-25951	80	A	p-	-0.8356	0.9132	60S	59E	33	595	07m11s
-0098-Mar-28	09:55:23	11546	294	-25946	47	P	-t	-1.2489	0.5411	61S	168E	0		
-0098-Apr-26	17:26:22	11545	294	-25945	85	P	t-	1.2875	0.4669	62N	149W	0		
-0098-Sep-20	15:21:12	11541	294	-25940	52	P	-t	1.4329	0.2176	61N	91E	0		
-0098-Oct-20	07:32:06	11540	294	-25939	90	P	t-	-1.4942	0.1230	61S	5E	0		
-0097-Mar-17	23:02:40	11536	294	-25934	57	H	-p	-0.5537	1.0001	31S	97W	56	0	00m00s

-0097-Sep-10	00:46:23	11530	294	-25928	62	T	-p	0.6524	1.0204	41N	120W	49	90	01m34s
-0096-Mar-06	05:01:56	11525	294	-25922	67	A	nn	0.1929	0.9495	3N	151E	79	188	05m38s
-0096-Aug-29	15:55:19	11520	293	-25916	72	T	nn	-0.0754	1.0636	7N	13W	86	209	05m18s
-0095-Feb-23	05:14:12	11515	293	-25910	77	A	p-	0.9223	0.9229	48N	115E	22	733	07m19s
-0095-Aug-19	08:24:33	11509	293	-25904	82	T	p-	-0.7920	1.0472	33S	79E	37	252	03m47s
-0094-Jan-13	16:03:49	11505	293	-25899	49	P	-t	-1.2769	0.4885	64S	136E	0		
-0094-Jul-10	09:58:47	11500	293	-25893	54	P	-t	1.1339	0.7422	64N	129W	0		
-0093-Jan-03	03:31:13	11494	293	-25887	59	T	-p	-0.5330	1.0275	55S	173W	58	110	02m03s
-0093-Jun-29	13:12:54	11489	293	-25881	64	A	-p	0.3944	0.9493	47N	33E	67	203	05m17s
-0093-Dec-23	18:57:12	11484	292	-25875	69	T	n-	0.1454	1.0474	15S	56W	82	159	04m28s
-0092-Jun-17	13:51:16	11479	292	-25869	74	A	p-	-0.3700	0.9576	2N	18E	68	166	05m48s
-0092-Dec-12	09:43:48	11473	292	-25863	79	H	p-	0.8355	1.0081	34N	81E	33	51	00m46s
-0091-May-08	09:27:33	11469	292	-25858	46	Pe	-t	1.5166	0.0416	70N	58W	0		
-0091-Jun-06	19:11:04	11468	292	-25857	84	P	t-	-1.1145	0.7819	67S	56W	0		
-0091-Nov-02	02:35:28	11464	292	-25852	51	P	-t	-1.3682	0.3343	70S	51E	0		
-0090-Apr-28	00:32:30	11458	292	-25846	56	T	-p	0.7307	1.0677	58N	161W	43	324	04m32s
-0090-Oct-22	02:24:45	11453	292	-25840	61	A	-p	-0.7102	0.9164	53S	170E	44	449	08m11s
-0089-Apr-17	17:40:10	11448	291	-25834	66	T	nn	-0.0017	1.0692	9N	38W	90	225	06m15s
-0089-Oct-11	03:02:09	11443	291	-25828	71	A	nn	-0.0035	0.9494	6S	179E	90	186	06m12s
-0088-Apr-06	08:09:29	11437	291	-25822	76	T	p-	-0.7708	1.0148	43S	124E	39	79	01m16s
-0088-Sep-29	10:30:05	11432	291	-25816	81	H	p-	0.7021	1.0013	41N	85E	45	6	00m07s
-0087-Feb-25	00:33:22	11428	291	-25811	48	P	-t	1.3052	0.4407	71N	165E	0		
-0087-Aug-20	15:49:37	11423	291	-25805	53	P	-t	-1.2345	0.5684	70S	56W	0		
-0087-Sep-19	00:28:50	11422	291	-25804	91	P	t-	1.3561	0.3370	72N	42W	0		
-0086-Feb-14	00:12:44	11417	291	-25799	58	A	-p	0.6022	0.9307	22N	140W	53	322	08m51s
-0086-Aug-10	07:55:38	11412	290	-25793	63	T	-p	-0.5443	1.0422	16S	103E	57	168	04m06s
-0085-Feb-03	03:13:23	11407	290	-25787	68	A	nn	-0.1303	0.9709	25S	175W	82	105	03m15s
-0085-Jul-30	19:28:57	11402	290	-25781	73	A	nn	0.2085	0.9926	32N	62W	78	27	00m46s
-0084-Jan-23	13:23:21	11396	290	-25775	78	T	p-	-0.8247	1.0158	75S	53E	34	97	01m01s
-0084-Jul-18	23:54:12	11391	290	-25769	83	An	t-	0.9966	0.9374	70N	38E	2	-	03m39s
-0084-Dec-13	18:03:47	11387	290	-25764	50	P	-t	1.2062	0.6202	65N	20W	0		
-0083-Jan-12	04:29:02	11386	290	-25763	88	P	t-	-1.4618	0.1377	68S	25W	0		
-0083-Jun-08	10:14:36	11382	290	-25758	55	P	-t	-1.0865	0.8211	64S	102E	0		

-0083-Dec-03	07:46:55	11376	289	-25752	60	A	-p	0.5674	0.9974	12N	117E	55	11	00m16s
-0082-May-28	17:37:23	11371	289	-25746	65	T	nn	-0.2697	1.0209	6N	34W	74	74	02m11s
-0082-Nov-22	15:18:40	11366	289	-25740	70	A	nn	-0.1273	0.9458	27S	7W	83	201	06m01s
-0081-May-18	07:45:21	11361	289	-25734	75	T	p-	0.4965	1.0674	46N	95E	60	253	04m52s
-0081-Nov-11	15:57:48	11356	289	-25728	80	A	p-	-0.8267	0.9117	64S	61W	34	596	07m12s
-0080-Apr-07	17:37:28	11351	289	-25723	47	P	-t	-1.3083	0.4280	61S	43E	0		
-0080-May-07	00:57:56	11350	289	-25722	85	P	t-	1.2211	0.5956	62N	89E	0		
-0080-Sep-30	23:12:26	11346	289	-25717	52	P	-t	1.4560	0.1773	61N	37W	0		
-0080-Oct-30	15:31:38	11345	289	-25716	90	P	t-	-1.4784	0.1496	62S	125W	0		
-0079-Mar-28	06:31:14	11341	288	-25711	57	A	-p	-0.6106	0.9989	31S	151E	52	5	00m06s
-0079-Sep-20	08:53:31	11336	288	-25705	62	T	-p	0.6821	1.0197	39N	118E	47	90	01m32s
-0078-Mar-17	12:11:08	11330	288	-25699	67	A	nn	0.1387	0.9506	4N	43E	82	183	05m27s
-0078-Sep-10	00:05:25	11325	288	-25693	72	T	nn	-0.0373	1.0611	5N	136W	88	201	05m02s
-0077-Mar-06	12:24:15	11320	288	-25687	77	A	p-	0.8743	0.9279	45N	8E	29	540	06m50s
-0077-Aug-30	16:21:23	11315	288	-25681	82	T	p-	-0.7492	1.0429	33S	42W	41	211	03m25s
-0076-Jan-25	00:15:38	11311	288	-25676	49	P	-t	-1.2890	0.4671	63S	2E	0		
-0076-Feb-23	14:20:04	11310	288	-25675	87	Pb	t-	1.5514	0.0119	61N	53W	0		
-0076-Jul-20	16:54:12	11305	287	-25670	54	P	-t	1.2083	0.6097	64N	116E	0		
-0076-Aug-19	05:01:33	11304	287	-25669	92	Pb	t-	-1.5315	0.0297	62S	90E	0		
-0075-Jan-13	12:09:15	11300	287	-25664	59	T	-p	-0.5412	1.0315	53S	61E	57	127	02m19s
-0075-Jul-09	19:40:17	11295	287	-25658	64	A	-p	0.4781	0.9461	51N	59W	61	226	05m18s
-0074-Jan-03	03:45:36	11290	287	-25652	69	T	n-	0.1399	1.0485	15S	171E	82	163	04m30s
-0074-Jun-28	20:21:03	11285	287	-25646	74	A	pn	-0.2844	0.9589	7N	81W	74	156	05m29s
-0074-Dec-23	18:26:05	11279	287	-25640	79	H	p-	0.8351	1.0066	33N	54W	33	41	00m37s
-0073-Jun-18	02:06:04	11274	287	-25634	84	P	t-	-1.0325	0.9318	66S	171W	0		
-0073-Nov-13	10:42:49	11270	286	-25629	51	P	-t	-1.3770	0.3201	70S	85W	0		
-0072-May-08	08:01:32	11265	286	-25623	56	T	-p	0.7996	1.0690	67N	80E	37	376	04m16s
-0072-Nov-01	10:16:45	11260	286	-25617	61	A	-p	-0.7224	0.9147	58S	51E	43	469	08m01s
-0071-Apr-28	01:12:30	11254	286	-25611	66	T	nn	0.0657	1.0694	17N	153W	86	226	06m13s
-0071-Oct-21	11:03:25	11249	286	-25605	71	A	nn	-0.0185	0.9495	11S	58E	89	185	06m09s
-0070-Apr-17	15:28:41	11244	286	-25599	76	T	p-	-0.7085	1.0149	34S	8E	45	72	01m22s
-0070-Oct-10	18:48:11	11239	286	-25593	81	H	p-	0.6817	1.0020	35N	44W	47	9	00m11s
-0069-Mar-08	07:46:21	11235	285	-25588	48	P	-t	1.3530	0.3596	72N	43E	0		

-0069-Apr-06	23:01:11	11234	285	-25587	86	Pb	t-	-1.5229	0.0606	72S	44W	0		
-0069-Aug-31	23:52:27	11230	285	-25582	53	P	-t	-1.2763	0.4880	71S	169E	0		
-0069-Sep-30	08:52:29	11229	285	-25581	91	P	t-	1.3301	0.3864	72N	177E	0		
-0068-Feb-25	07:34:42	11224	285	-25576	58	A	-p	0.6404	0.9345	28N	106E	50	315	07m51s
-0068-Aug-20	15:40:42	11219	285	-25570	63	T	-p	-0.5963	1.0357	22S	17W	53	149	03m22s
-0067-Feb-13	11:06:30	11214	285	-25564	68	A	nn	-0.1027	0.9769	20S	66E	84	83	02m35s
-0067-Aug-10	02:41:43	11209	285	-25558	73	A	nn	0.1475	0.9867	25N	171W	81	47	01m26s
-0066-Feb-02	21:46:12	11204	285	-25552	78	T	p-	-0.8041	1.0217	69S	71W	36	125	01m26s
-0066-Jul-30	06:36:22	11199	284	-25546	83	A	t-	0.9263	0.9386	82N	158W	22	618	04m17s
-0066-Dec-25	02:53:23	11194	284	-25541	50	P	-t	1.2113	0.6106	66N	163W	0		
-0065-Jan-23	13:07:01	11194	284	-25540	88	P	t-	-1.4483	0.1623	69S	167W	0		
-0065-Jun-19	16:49:58	11189	284	-25535	55	P	-t	-1.1661	0.6825	65S	7W	0		
-0065-Dec-14	16:25:47	11184	284	-25529	60	A	-p	0.5701	0.9949	11N	14W	55	21	00m33s
-0064-Jun-08	00:40:14	11179	284	-25523	65	T	-n	-0.3470	1.0241	3N	141W	70	87	02m34s
-0064-Dec-02	23:34:27	11174	284	-25517	70	Am	nn	-0.1243	0.9432	29S	131W	83	211	06m27s
-0063-May-28	15:07:59	11169	284	-25511	75	T	p-	0.4208	1.0707	45N	12W	65	253	05m15s
-0063-Nov-21	23:57:52	11164	283	-25505	80	A	p-	-0.8202	0.9108	68S	180E	35	596	07m12s
-0062-Apr-19	01:10:04	11159	283	-25500	47	P	-t	-1.3749	0.3014	61S	80W	0		
-0062-May-18	08:24:08	11158	283	-25499	85	P	t-	1.1505	0.7324	63N	33W	0		
-0062-Oct-12	07:14:43	11154	283	-25494	52	P	-t	1.4711	0.1509	61N	167W	0		
-0062-Nov-10	23:38:23	11153	283	-25493	90	P	t-	-1.4678	0.1672	62S	104E	0		
-0061-Apr-08	13:48:56	11149	283	-25488	57	A	-p	-0.6755	0.9971	31S	42E	47	13	00m16s
-0061-Oct-01	17:10:11	11144	283	-25482	62	T	-p	0.7046	1.0192	36N	8W	45	91	01m31s
-0060-Mar-27	19:10:27	11139	283	-25476	67	Am	nn	0.0770	0.9515	6N	62W	86	178	05m21s
-0060-Sep-20	08:23:47	11134	283	-25470	72	T	nn	-0.0063	1.0584	2N	99E	90	192	04m48s
-0059-Mar-16	19:25:25	11129	282	-25464	77	A	p-	0.8186	0.9329	44N	96W	35	422	06m19s
-0059-Sep-10	00:24:47	11123	282	-25458	82	T	p-	-0.7124	1.0380	33S	164W	44	178	02m59s
-0058-Feb-04	08:22:40	11119	282	-25453	49	P	-t	-1.3056	0.4373	62S	129W	0		
-0058-Mar-05	21:49:51	11118	282	-25452	87	P	t-	1.5058	0.0887	61N	175W	0		
-0058-Jul-31	23:53:10	11114	282	-25447	54	P	-t	1.2786	0.4858	63N	1E	0		
-0058-Aug-30	12:36:03	11113	282	-25446	92	P	t-	-1.4904	0.1064	61S	33W	0		
-0057-Jan-24	20:42:08	11109	282	-25441	59	T	-p	-0.5544	1.0359	51S	64W	56	145	02m36s
-0057-Jul-21	02:13:07	11104	282	-25435	64	A	-p	0.5570	0.9427	54N	152W	56	254	05m23s

-0056-Jan-14	12:30:11	11099	282	-25429	69	T	n-	0.1311	1.0499	15S	40E	83	167	04m33s
-0056-Jul-09	02:56:01	11094	281	-25423	74	A	nn	-0.2023	0.9599	12N	180E	78	149	05m09s
-0055-Jan-03	03:05:05	11089	281	-25417	79	H	p-	0.8327	1.0054	33N	172E	33	34	00m31s
-0055-Jun-28	09:05:15	11084	281	-25411	84	A	t-	-0.9524	0.9991	49S	79E	17	10	00m05s
-0055-Nov-23	18:51:26	11079	281	-25406	51	P	-t	-1.3839	0.3092	69S	140E	0		
-0054-May-19	15:28:01	11074	281	-25400	56	T	-p	0.8708	1.0691	77N	44W	29	463	03m55s
-0054-Nov-12	18:13:35	11069	281	-25394	61	A	-p	-0.7308	0.9137	63S	68W	43	483	07m49s
-0053-May-09	08:40:44	11064	281	-25388	66	T	-n	0.1360	1.0686	24N	93E	82	226	06m03s
-0053-Nov-01	19:10:54	11059	280	-25382	71	A	nn	-0.0293	0.9503	16S	65W	88	182	06m02s
-0052-Apr-27	22:41:39	11054	280	-25376	76	T	p-	-0.6417	1.0143	26S	105W	50	64	01m25s
-0052-Oct-21	03:13:51	11049	280	-25370	81	H	p-	0.6667	1.0028	30N	173W	48	13	00m16s
-0051-Mar-18	14:48:05	11045	280	-25365	48	P	-t	1.4091	0.2641	72N	78W	0		
-0051-Apr-17	05:50:41	11044	280	-25364	86	P	t-	-1.4574	0.1745	71S	161W	0		
-0051-Sep-11	08:03:19	11039	280	-25359	53	P	-t	-1.3116	0.4206	72S	32E	0		
-0051-Oct-10	17:24:18	11039	280	-25358	91	P	t-	1.3107	0.4233	72N	34E	0		
-0050-Mar-07	14:46:34	11034	280	-25353	58	A	-p	0.6873	0.9383	35N	7W	46	312	06m51s
-0050-Aug-31	23:33:32	11029	280	-25347	63	T	-p	-0.6409	1.0290	29S	139W	50	127	02m38s
-0049-Feb-24	18:50:29	11024	279	-25341	68	A	nn	-0.0667	0.9831	14S	52W	86	60	01m52s
-0049-Aug-21	10:01:53	11019	279	-25335	73	Am	nn	0.0936	0.9807	19N	77E	85	69	02m10s
-0048-Feb-14	06:02:15	11014	279	-25329	78	T	p-	-0.7774	1.0279	63S	163E	39	150	01m54s
-0048-Aug-09	13:23:57	11009	279	-25323	83	A	p-	0.8606	0.9367	73N	61E	30	466	04m55s
-0047-Jan-04	11:40:50	11005	279	-25318	50	P	-t	1.2181	0.5979	67N	53E	0		
-0047-Feb-02	21:39:51	11004	279	-25317	88	P	t-	-1.4309	0.1944	70S	52E	0		
-0047-Jun-29	23:27:47	11000	279	-25312	55	P	-t	-1.2438	0.5464	66S	118W	0		
-0047-Dec-25	01:02:35	10995	279	-25306	60	A	-p	0.5742	0.9930	11N	146W	55	30	00m47s
-0046-Jun-19	07:44:13	10990	278	-25300	65	T	-p	-0.4243	1.0265	1S	112E	65	99	02m52s
-0046-Dec-14	07:49:56	10985	278	-25294	70	A	nn	-0.1215	0.9413	30S	107E	83	219	06m50s
-0045-Jun-08	22:31:19	10980	278	-25288	75	T	n-	0.3450	1.0731	43N	119W	70	253	05m37s
-0045-Dec-03	07:58:56	10974	278	-25282	80	A	p-	-0.8144	0.9105	72S	63E	35	592	07m10s
-0044-Apr-29	08:38:22	10970	278	-25277	47	P	-t	-1.4444	0.1693	62S	158E	0		
-0044-May-28	15:49:33	10969	278	-25276	85	P	t-	1.0794	0.8699	63N	154W	0		
-0044-Oct-22	15:24:04	10965	278	-25271	52	P	-t	1.4813	0.1329	61N	61E	0		
-0044-Nov-21	07:48:50	10964	278	-25270	90	P	t-	-1.4594	0.1809	63S	29W	0		

-0043-Apr-18	20:58:50	10960	278	-25265	57	A	-p	-0.7459	0.9947	33S	66W	42	27	00m29s
-0043-Oct-12	01:34:27	10955	277	-25259	62	T	-p	0.7216	1.0189	34N	136W	44	91	01m32s
-0042-Apr-08	02:00:44	10950	277	-25253	67	A	nn	0.0085	0.9522	6N	164W	89	175	05m19s
-0042-Oct-01	16:49:55	10945	277	-25247	72	T	nn	0.0184	1.0558	1S	29W	89	184	04m35s
-0041-Mar-28	02:17:58	10940	277	-25241	77	A	p-	0.7553	0.9377	43N	162E	41	343	05m50s
-0041-Sep-21	08:36:20	10935	277	-25235	82	T	p-	-0.6829	1.0331	35S	71E	47	150	02m34s
-0040-Feb-15	16:22:17	10931	277	-25230	49	P	-t	-1.3293	0.3945	62S	101E	0		
-0040-Mar-16	05:12:21	10930	277	-25229	87	P	t-	1.4531	0.1789	61N	65E	0		
-0040-Aug-11	06:57:38	10926	277	-25224	54	P	-t	1.3433	0.3729	62N	115W	0		
-0040-Sep-09	20:17:06	10925	277	-25223	92	P	t-	-1.4551	0.1717	61S	158W	0		
-0039-Feb-04	05:08:20	10921	276	-25218	59	T	-p	-0.5738	1.0404	49S	172E	55	164	02m55s
-0039-Jul-31	08:51:42	10916	276	-25212	64	A	-p	0.6310	0.9390	55N	115E	51	290	05m31s
-0038-Jan-24	21:07:09	10911	276	-25206	69	T	n-	0.1162	1.0517	13S	90W	83	172	04m37s
-0038-Jul-20	09:37:29	10906	276	-25200	74	A	nn	-0.1247	0.9603	15N	80E	83	145	04m52s
-0037-Jan-14	11:37:47	10901	276	-25194	79	H	p-	0.8257	1.0048	32N	40E	34	30	00m27s
-0037-Jul-09	16:10:02	10896	276	-25188	84	H	t-	-0.8759	1.0041	37S	30W	29	30	00m24s
-0037-Dec-05	03:00:34	10891	276	-25183	51	P	-t	-1.3898	0.2998	68S	6E	0		
-0036-May-29	22:53:24	10886	275	-25177	56	T	-t	0.9431	1.0674	85N	122E	19	682	03m28s
-0036-Nov-23	02:14:47	10881	275	-25171	61	A	-p	-0.7357	0.9134	67S	176E	42	490	07m38s
-0035-May-19	16:03:30	10876	275	-25165	66	T	-n	0.2105	1.0672	31N	19W	78	225	05m46s
-0035-Nov-12	03:25:35	10871	275	-25159	71	A	nn	-0.0347	0.9515	19S	170E	88	178	05m51s
-0034-May-09	05:47:39	10866	275	-25153	76	H	p-	-0.5698	1.0131	18S	144E	55	55	01m23s
-0034-Nov-01	11:46:29	10861	275	-25147	81	H	p-	0.6571	1.0040	26N	55E	49	18	00m23s
-0033-Mar-29	21:41:11	10857	275	-25142	48	P	-t	1.4713	0.1579	72N	164E	0		
-0033-Apr-28	12:33:44	10856	275	-25141	86	P	t-	-1.3871	0.2969	71S	84E	0		
-0033-Sep-22	16:22:17	10852	274	-25136	53	P	-t	-1.3405	0.3660	72S	108W	0		
-0033-Oct-22	02:03:09	10851	274	-25135	91	P	t-	1.2968	0.4496	71N	110W	0		
-0032-Mar-17	21:52:27	10847	274	-25130	58	A	-p	0.7393	0.9421	43N	119W	42	314	05m54s
-0032-Sep-11	07:32:03	10842	274	-25124	63	T	-p	-0.6800	1.0224	35S	97E	47	103	01m57s
-0031-Mar-07	02:28:59	10837	274	-25118	68	A	nn	-0.0253	0.9895	8S	168W	89	37	01m09s
-0031-Aug-31	17:28:09	10832	274	-25112	73	A	nn	0.0459	0.9745	12N	36W	87	91	02m55s
-0030-Feb-24	14:10:17	10827	274	-25106	78	T	p-	-0.7436	1.0343	56S	38E	42	172	02m27s
-0030-Aug-20	20:19:48	10822	274	-25100	83	A	p-	0.8019	0.9341	64N	53W	36	412	05m38s

-0029-Jan-15	20:21:43	10818	273	-25095	50	P	-t	1.2299	0.5757	68N	89W	0		
-0029-Feb-14	06:04:02	10817	273	-25094	88	P	t-	-1.4070	0.2390	70S	87W	0		
-0029-Jul-11	06:12:46	10813	273	-25089	55	P	-t	-1.3162	0.4193	67S	130E	0		
-0029-Aug-09	20:27:10	10812	273	-25088	93	Pb	t-	1.5171	0.0780	70N	65E	0		
-0028-Jan-05	09:33:13	10808	273	-25083	60	A	-p	0.5826	0.9915	13N	84E	54	37	00m58s
-0028-Jun-29	14:53:39	10803	273	-25077	65	T	-p	-0.4977	1.0283	6S	3E	60	110	03m03s
-0028-Dec-24	16:01:30	10798	273	-25071	70	A	nn	-0.1163	0.9400	31S	15W	83	224	07m08s
-0027-Jun-19	05:54:50	10793	273	-25065	75	T	n-	0.2692	1.0746	39N	132E	74	251	05m57s
-0027-Dec-13	15:59:57	10788	273	-25059	80	A	p-	-0.8088	0.9109	75S	48W	36	583	07m08s
-0026-May-10	15:59:38	10784	273	-25054	47	Pe	-t	-1.5184	0.0291	62S	38E	0		
-0026-Jun-08	23:12:41	10783	272	-25053	85	T+	t-	1.0070	1.0093	64N	85E	0		
-0026-Nov-02	23:41:26	10779	272	-25048	52	P	-t	1.4858	0.1247	62N	73W	0		
-0026-Dec-02	16:02:00	10778	272	-25047	90	P	t-	-1.4528	0.1914	64S	162W	0		
-0025-Apr-30	04:00:16	10774	272	-25042	57	A	-t	-0.8218	0.9915	36S	171W	34	51	00m47s
-0025-Oct-23	10:07:20	10769	272	-25036	62	T	-p	0.7317	1.0189	31N	93E	43	93	01m35s
-0024-Apr-18	08:42:28	10764	272	-25030	67	A	nn	-0.0665	0.9527	7N	96E	86	173	05m22s
-0024-Oct-12	01:23:03	10759	272	-25024	72	T	nn	0.0372	1.0532	5S	158W	88	176	04m25s
-0023-Apr-07	09:03:25	10754	272	-25018	77	A	p-	0.6857	0.9425	43N	63E	46	285	05m23s
-0023-Oct-01	16:54:50	10749	272	-25012	82	T	p-	-0.6598	1.0281	38S	55W	49	124	02m09s
-0022-Feb-26	00:14:39	10745	271	-25007	49	P	-t	-1.3593	0.3396	61S	27W	0		
-0022-Mar-27	12:27:26	10744	271	-25006	87	P	t-	1.3933	0.2827	61N	53W	0		
-0022-Aug-22	14:08:22	10740	271	-25001	54	P	-t	1.4018	0.2722	62N	128E	0		
-0022-Sep-21	04:05:44	10739	271	-25000	92	P	t-	-1.4265	0.2243	61S	75E	0		
-0021-Feb-15	13:28:11	10735	271	-24995	59	T	-p	-0.5989	1.0450	46S	49E	53	186	03m13s
-0021-Aug-11	15:37:12	10730	271	-24989	64	A	-p	0.6988	0.9351	55N	20E	45	334	05m42s
-0020-Feb-05	05:38:16	10725	271	-24983	69	Tm	nn	0.0965	1.0536	12S	142E	85	178	04m40s
-0020-Jul-30	16:26:57	10720	271	-24977	74	A	nn	-0.0531	0.9604	17N	22W	87	144	04m38s
-0019-Jan-24	20:04:09	10715	271	-24971	79	H	p-	0.8143	1.0047	32N	91W	35	27	00m26s
-0019-Jul-19	23:20:41	10710	270	-24965	84	H	p-	-0.8031	1.0076	30S	140W	36	44	00m45s
-0019-Dec-15	11:08:08	10706	270	-24960	51	P	-t	-1.3963	0.2892	66S	128W	0		
-0018-Jun-10	06:19:15	10701	270	-24954	56	P	-t	1.0153	0.9956	67N	50W	0		
-0018-Jul-09	13:12:06	10700	270	-24953	94	Pb	t-	-1.4931	0.0725	65S	0W	0		
-0018-Dec-04	10:16:20	10696	270	-24948	61	A	-p	-0.7406	0.9139	70S	63E	42	492	07m25s

-0017-May-30	23:25:11	10691	270	-24942	66	T	-n	0.2854	1.0649	38N	130W	73	222	05m23s
-0017-Nov-23	11:43:51	10686	270	-24936	71	A	nn	-0.0383	0.9533	22S	46E	88	171	05m35s
-0016-May-19	12:48:52	10681	270	-24930	76	H	p-	-0.4949	1.0112	10S	35E	60	44	01m15s
-0016-Nov-11	20:24:04	10676	269	-24924	81	H	p-	0.6509	1.0054	23N	77W	49	25	00m33s
-0015-Apr-09	04:24:50	10672	269	-24919	48	Pe	-t	1.5403	0.0399	72N	49E	0		
-0015-May-08	19:09:23	10671	269	-24918	86	P	t-	-1.3109	0.4293	70S	28W	0		
-0015-Oct-03	00:49:12	10667	269	-24913	53	P	-t	-1.3626	0.3244	72S	111E	0		
-0015-Nov-01	10:48:03	10667	269	-24912	91	P	t-	1.2882	0.4659	70N	104E	0		
-0014-Mar-29	04:47:48	10662	269	-24907	58	A	-p	0.8001	0.9456	52N	130E	37	331	05m02s
-0014-Sep-22	15:39:08	10657	269	-24901	63	T	-p	-0.7111	1.0158	42S	29W	44	77	01m19s
-0013-Mar-18	09:59:12	10653	269	-24895	68	A	nn	0.0237	0.9959	1S	77E	89	14	00m27s
-0013-Sep-12	01:01:35	10648	269	-24889	73	A	nn	0.0051	0.9685	6N	152W	90	113	03m41s
-0012-Mar-06	22:11:23	10643	268	-24883	78	T	p-	-0.7037	1.0407	48S	87W	45	191	03m03s
-0012-Aug-31	03:23:16	10638	268	-24877	83	A	p-	0.7496	0.9311	56N	165W	41	388	06m24s
-0011-Jan-26	04:57:17	10634	268	-24872	50	P	-t	1.2459	0.5455	69N	130E	0		
-0011-Feb-24	14:20:55	10633	268	-24871	88	P	t-	-1.3774	0.2947	71S	134E	0		
-0011-Jul-21	13:02:36	10629	268	-24866	55	P	-t	-1.3852	0.2981	68S	15E	0		
-0011-Aug-20	03:25:40	10628	268	-24865	93	P	t-	1.4558	0.1831	71N	53W	0		
-0010-Jan-15	17:59:18	10624	268	-24860	60	A	-p	0.5940	0.9904	15N	45W	53	42	01m05s
-0010-Jul-10	22:07:36	10619	268	-24854	65	T	-p	-0.5680	1.0294	12S	108W	55	121	03m06s
-0009-Jan-05	00:08:24	10614	268	-24848	70	A	nn	-0.1080	0.9393	29S	136W	84	227	07m21s
-0009-Jun-30	13:22:17	10609	267	-24842	75	T	n-	0.1964	1.0753	35N	22E	78	249	06m14s
-0009-Dec-24	23:59:30	10604	267	-24836	80	A	p-	-0.8023	0.9119	77S	153W	36	568	07m05s
-0008-Jun-19	06:36:23	10599	267	-24830	85	T	t-	0.9353	1.0602	82N	11E	20	574	03m07s
-0008-Nov-13	08:03:24	10595	267	-24825	52	P	-t	1.4873	0.1214	62N	152E	0		
-0008-Dec-13	00:15:57	10594	267	-24824	90	P	t-	-1.4461	0.2017	65S	64E	0		
-0007-May-10	10:56:22	10590	267	-24819	57	A	-t	-0.9010	0.9872	42S	86E	25	102	01m09s
-0007-Nov-02	18:45:31	10585	267	-24813	62	T	-p	0.7383	1.0194	29N	40W	42	96	01m40s
-0006-Apr-29	15:16:51	10580	267	-24807	67	A	nn	-0.1471	0.9528	6N	3W	82	174	05m32s
-0006-Oct-23	10:02:48	10575	266	-24801	72	T	nn	0.0504	1.0509	8S	71E	87	169	04m17s
-0005-Apr-18	15:42:55	10571	266	-24795	77	A	p-	0.6105	0.9470	42N	34W	52	242	05m00s
-0005-Oct-13	01:19:19	10566	266	-24789	82	T	p-	-0.6422	1.0233	41S	178E	50	102	01m46s
-0004-Mar-08	07:59:37	10562	266	-24784	49	P	-t	-1.3962	0.2715	61S	152W	0		

-0004-Apr-06	19:37:00	10561	266	-24783	87	P	t-	1.3278	0.3980	61N	170W	0		
-0004-Sep-01	21:26:44	10557	266	-24778	54	P	-t	1.4532	0.1850	61N	9E	0		
-0004-Oct-01	12:01:25	10556	266	-24777	92	P	t-	-1.4043	0.2650	61S	53W	0		
-0003-Feb-25	21:39:20	10552	266	-24772	59	T	-p	-0.6318	1.0495	43S	73W	51	209	03m32s
-0003-Aug-21	22:31:05	10547	266	-24766	64	A	-p	0.7596	0.9311	55N	79W	40	390	05m57s
-0002-Feb-15	14:00:20	10542	266	-24760	69	T	nn	0.0695	1.0557	10S	16E	86	184	04m45s
-0002-Aug-10	23:25:52	10537	265	-24754	74	A	nn	0.0116	0.9602	17N	127W	89	144	04m28s
-0001-Feb-05	04:21:06	10532	265	-24748	79	H	p-	0.7958	1.0049	32N	142E	37	27	00m26s
-0001-Jul-31	06:40:04	10527	265	-24742	84	H	p-	-0.7364	1.0101	26S	109E	42	50	00m59s
-0001-Dec-26	19:13:40	10523	265	-24737	51	P	-t	-1.4043	0.2761	65S	100E	0		
0000-Jun-20	13:45:14	10518	265	-24731	56	P	-t	1.0875	0.8553	66N	173W	0		
0000-Jul-19	20:43:55	10518	265	-24730	94	P	t-	-1.4255	0.2023	64S	124W	0		
0000-Dec-14	18:19:16	10513	265	-24725	61	A	-p	-0.7445	0.9150	72S	46W	42	488	07m12s